

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 158189

TO: Ruixiang Li

Location: rem/4D75/4C70

Art Unit: 1646

Monday, July 11, 2005

Case Serial Number: 10/060765

From: Barb O'Bryen

Location: Biotech-Chem Library

Remsen 1a69

Phone: 571-272-2518

BOB

barbara.obryen@uspto.gov

Search Notes		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
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From:

Li, Ruixiang

Sent:

Tuesday, July 05, 2005 11:55 AM STIC-Biotech/ChemLib

To:

Subject:

Sequence search of Application No.10/060,765

Please do a standard search on:

- (i). SEQ ID NOS: 4, 7, and 8 against both commercial and interference amino acid databases.
- (ii). An oligomer of SEQ ID NO: 4 against both commercial and interference amino acid databases.

Thank you very much!

Ruixiang Li GAU 1646 REM 4D75 Mail Box 4C70 (571) 272-0875

Claim 15. An epitope-bearing portion of the polypeptide of SEQ ID NO: 4.

Claim 16. The epitope-bearing portion of claim 15, which comprises between 10 and 50 contiguous amino acids of SEQ ID NO: 4.

STAFF USE ONLY
Searcher:
Searcher Phone: 2-
Date Searcher Picked up:
Date Completed:
Searcher Prep/Rev. Time:
Online Time:

NA#:	AA#:
Interference:	SPDI:
S/L:	Oligomer:
Encode/Tran	sl:
Structure#:_	Text:
Inventor:	Litigation:

Type of Search

endors and cost where applicable
STN:
DIALOG:
QUESTEL/ORBIT:
LEXIS/NEXIS:
SEQUENCE SYSTEM:
www/Internet:
Other(Specify)

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Sequence 4294, Ap Sequence 1658, Ap Sequence 13618, A Sequence 13518, A Sequence 32358, A Sequence 32326, A Sequence 23226, A Sequence 23227, A Sequence 21587, A Sequence 21587, A Sequence 21587, A Sequence 24169, A

Perfect score:

Sequence:

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OM protein

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Scoring table:

Word size :

Minimum DB a

Database :

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61 LEIREDGIVGGAADOSPESLLOLKALKPGVIOILGVKISRFLCQRPGALYGSLHFDPEA
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US-09-300-207-2
Sequence 2, Application US/09390207
Sequence 2, Application US/09390207
Patent No. 6504530
GENERAL INFORMATION:
APPLICANT: Thomason, Arlen
APPLICANT: Liu, Benxian
TITLE OF INVENTION:
FILE REFERENCE: 99-371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4, Application US/09715805
Patent No. 6716626
GENERAL INFORMATION:
APPLICANT: Ttoh, No. 6716626uyuki
APPLICANT: Kavanaugh, W. Michael
TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS
FILE REFERENCE: PP-16758.001/201130.408
CURRENT APPLICATION UNBER: US/09/715,805
CURRENT FILING DATE: 2000-11-16
NUMBER OF SEQ ID NOS: 17
SOCTWARRE: FasteSEQ for Windows Version 4.0
SEQ ID NO 4
LENGTH: 209
US-09-583-110-4296
US-09-107-431-4294
US-09-902-540-16583
US-09-489-039A-13618
US-09-489-039A-14052
US-09-252-991A-23238
US-09-252-991A-23227
US-09-252-991A-23227
US-09-252-991A-23227
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US-09-252-991A-24169
US-09-252-991A-24169
US-09-252-991A-19246
US-09-252-991A-19246
US-09-252-991A-19246
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Best Local Similarity 100.
Matches 209; Conservative
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; ORGANISM: Homo sapiens
US-09-715-805-4
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Sequence 7, Appli
Sequence 5, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 2, Appli
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Sequence 6423, Ap
Sequence 6, Appli
Sequence 8256, Ap
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7, Appli
8, Appli
19831, A
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7, Appli
7, Appli
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                                                                                                                                                                                                                                                                                                                  US-10-060-765-4
209
1 MDSDETGFEHSGLWVSVLAG......SSDPLSMVGPSQGRSPSYAS 209
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1. /cgm2_6/ptodata/1/iaa/5A_COMB.pep:*

2. /cgm2_6/ptodata/1/iaa/5B_COMB.pep:*

3. /cgm2_6/ptodata/1/iaa/6A_COMB.pep:*

3. /cgm2_6/ptodata/1/iaa/6A_COMB.pep:*

3. /cgm2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

5. /cgm2_6/ptodata/1/iaa/PcTUS_COMB.pep:*

5. /cgm2_6/ptodata/1/iaa/PcTUS_COMB.pep:*
                                    GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd
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US-09-390-207-2
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US-09-390-207-4
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US-09-715-805-7
US-09-715-805-7
US-09-715-805-7
US-09-715-805-7
US-09-715-805-8
US-09-252-991A-19831
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US-08-319-704-6
US-09-489-039A-8256
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Gapop 60.0 , Gapext 60.0
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seq length: 200000000
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| Sequence 5. Application US/09390207
| Patent No. 6504530
| GENERAL INFORMATION:
| APPLICANT: Thomason, Arlen
| APPLICANT: Thomason, Arlen
| APPLICANT: Thomason, Arlen
| TITLE OF INVENTION: Fibroblast Growth Factor-Like Polypeptides
| TITLE REFERENCE: 99-371
| CURRENT APPLICATION NUMBER: US/09/390,207
| NUMBER OF SEQ ID NOS: 41
| SOFTWARE: Patentin Ver. 2.0
| SEQ ID NO 5
| LENGTH: 181
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Sequence 5213, Application US/09621976

Patent No. 6639063

GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 69.4%; Score 145; DB 4; Le Best Local Similarity 100.0%; Pred. No. 8.6e-132; Matches 145; Conservative 0; Mismatches 0;
CURRENT APPLICATION NUMBER: US/09/390,207
CURRENT FILING DATE: 1999-09-07
NUMBER OF SEQ ID NOS: 41
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 209
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CORGANISM: Homo sapiens
US-09-390-207-5
                                                                                                                                ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-390-207-2
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1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH 60
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Patent No. 6504530
REGNERAL INFORMATION:
APPLICANT: Liu, Benxian
CURRENT APPLICATION UNMBER: US/09/390,207
CURRENT PILING DATE: 1999-09-07
NUMBER OF SEQ ID NOS: 41
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 6.
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Patent No. 6504530
GENERAL INFORMATION:
APPLICANT: Thomason, Arlen
APPLICANT: Liu, Benxian
APPLICANT: Liu, Benxian
APPLICANT: Liu, Benxian
APPLICANT: Liu, Benxian
CURRENT PRING: 99-31
CURRENT APPLICATION NUMBER: US/09/390,207
CURRENT PILING DATE: 1999-09-07
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIN Ver. 2.0
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                                                                                                                                                                                                                                                                                                                                                                                                                         Length 85;
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100.0%; Pred. No. 1.7e-68;
tive 0; Mismatches 0;
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CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 5213
LENGTH: 85
                                                                                                                                                                                                 NAME/KEY: SIGNAL
LOCATION: -28...1
NAME/KEY: UNSURE
LOCATION: 57
OTHER INFORMATION: Xaa = Ala, Pro
NAME/KEY: UNSURE
LOCATION: 52
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US-09-621-976-5213
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Best Local Similarity 100.0
Matches 79; Conservative
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Matches 30; Conservative
                                                                                                                                                             ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Mus musculus
US-09-390-207-6
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US-09-390-207-6
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US-09-390-207-4
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Patent No. 6504530

GENERAL INFORMATION:

APPLICANT: Thomason, Arlen

APPLICANT: Liu, Benxian

TITLE OF INVENTION: Fibroblast Growth Factor-Like Polypeptides

FILE REFERENCE: 99-371

CURRENT APPLICATION WHERE: US/09/390,207

CURRENT FILING DATE: 1999-09-07

NUMBER OF SEQ ID NOS: 41

SOCTAME: PatentIn Ver. 2.0

SEQ ID NO 41

LENGTH: 28
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                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/09715805
Fatent No. 6716626
GENERAL INFORMATION:
APPLICANT: Itch, No. 6716626uyuki
APPLICANT: ATOMATION:
TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS
FILE REFREENCE: PP-16758.001/201130.408
CURRENT APPLICATION NUMBER: US/09/715,805
CURRENT FILING DATE: 2000-11-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 4; Length 210;
6.7e-21;
                                                                                                            Length 210;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 13.4%; Score 28; DB 4; Length 28; Best Local Similarity 100.0%; Pred. No. 8.2e-20; Matches 28; Conservative 0; Mismatches 0; Indels
                                                                                                                                                 Indels
                                                                                                                                6.7e-21;
                                                                                                                DB 4;
                                                                                                                                                                                      115 HFDPEACSFRELLLEDGYNVYQSEAHGLPL 144
                                                                                                                                                                                                                  116 HFDPEACSFRELLLEDGYNVYQSEAHGLPL 145
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           116 HFDPEACSFRELLLEDGYNVYQSEAHGLPL 145
                                                                                                            Query Match 14.4%; Score 30; DB Best Local Similarity 100.0%; Pred. No. 6.7 Matches 30; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14.4%; Score 30; DB 100.0%; Pred. No. 6.7 tive 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 2 LENGTH: 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 100.
Matches 30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Mus musculus
US-09-715-805-2
                                   ; TYPE: PRT
; ORGANISM: Mus musculus
US-09-390-207-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-390-207-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-390-207-41
; SEQ ID NO 4
; LENGTH: 210
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RESULT 9

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APPLICANT: MARC J. Rubenfield et al.
APPLICANT: MARC J. Rubenfield et al.
APPLICANT: MARC J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-18
NIOMBER OF SEQ ID NOS: 33142
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Sequence 7, Application US/09715805
; Batent No. 6716626
; GENERAL INPORMATION:
APPLICANT: Itch, No. 6716626uyuki
; APPLICANT: Itch, No. 6716626uyuki
; APPLICANT: KAVANAUGH, W. Michael
; TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
; TITLE OF INVENTION: HOWER: US/01/201130.408
; CURRENT FILING DATE: 2000-11-16
; NUMBER OF SEQ ID NOS: 17
; SEQ ID NOS: 17
; SEQ ID NO 7
; SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 8, Application US/09715805
; Patent No. 6716626
; GENERAL INFORMATION:
; APPLICANT: Itch, No. 6716626uyuki
; APPLICANT: ALCH, No. 6716626uyuki
; ATLLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
; TITLE OF INVENTION: HUMAN FGP-21 GENE AND GENE EXPRESSION
; TITLE OF INVENTION: HUMAN FGP-10720
; FILE REFERENCE: PP-16758.001/201130.408
; CURRENT APPLICATION NUMBER: US/09/715,805
; CURRENT FILING DATE: 2000-11-16
; NUMBER OF SEQ ID NOS: 17
; SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 7.7%; Score 16; DB 4; Length 16; Best Local Similarity 100.0%; Pred. No. 1.8e-08; Matches 16; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 19831, Application US/09252991A ; Patent No. 6551795
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                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Homo sapiens
US-09-715-805-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-09-715-805-8
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Best Local Similarity
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US-09-009-953-10
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Sequence 16018 Application US/09902540

Pacent No. 6833447

GENERAL INFORMATION:

APPLICANT: Goldman, Barry S.

APPLICANT: Slater, Steven C.

APPLICANT: Slater, Steven C.

TITLE OF INVERTION: Myxococcus xanthus Genome Sequences and Uses Thereof

FILE REFERENCE: 38-10(15849)B

CURRENT APPLICATION WUMBER: 105/09/902,540

CURRENT PILING DATE: 2001-07-10

PRIOR APPLICATION NUMBER: 60/217,883

PRIOR FILING DATE: 2000-07-10

NUMBER OF SEQ ID NOS: 16825

SEQ ID NO 16018

LENGTH: 564
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APPLICANT: SPARKS, Andrew B.
APPLICANT: THORN, Judith M.
APPLICANT: THORN, Judith M.
APPLICANT: OUTLIAM, Lawrence A.
APPLICANT: FOWLKES, Dana M.
APPLICANT: RIDER, James B.
TITLE OF INVENTION: SH3 BINDING PEPTIDES AND METHODS OF TITLE OF INVENTION: 1SOLATING AND USING SAME NUMBER OF SEQUENCES: 467
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.8%; Score 8; DB 4; Length 564; 100.0%; Pred. No. 27; trive 0; Mismatches 0; Indels
                                                                                                                                   Length 477;
                                                                                                                                                                              0; Indels
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                                                                                                                                   DB 4;
                                                                                                                              Query Match 3.8%; Score 8; DB 4
Best Local Similarity 100.0%; Pred. No. 23;
Matches 8; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 1155 Avenue of the Americas STREET: 1155 Avenue of the Americas CITY: New York STATE: New York COUNTRY: U.S.A. ZIP: 10036-271. COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC COMPABLISH OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Versi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 394, Application US/08602999A Patent No. 6184205 GENERAL INFORMATION:
                                         ; TYPE: PRT; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-19831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Myxococcus xanthus US-09-902-540-16018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 100.
Matches 8; Conservative
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US-08-602-999A-394
SEQ ID NO 19831
LENGTH: 477
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Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 10, Application US/09009953
; Patent No. 6413517
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; IITLE OF INVENTION: Identification of Broadly
; Reactive DR Restricted Epitopes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSER: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: CA
STATE: CA
COUNTRY: USA
ZIP: 9411-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastESEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/009,953
FILING DATE: 21-Jan-1998
CLASSIFTCATION: <UNANOMS.
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 60/036,713
PILING DATE: 23-JAN-1997
APPLICATION NUMBER: US 60/037,432
FILING DATE: 07-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-011520US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.3%; Score 7; DB 3
Best Local Similarity 100.0%; Pred. No. 7.8
Matches 7; Conservative 0; Mismatches
CURRENT APPLICATION DATA:

APPLICATION NUBER: US/08/602,999A
FILING DATE: 16-FEB-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: MISTOCK, S. Lessie
REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 1101-202
TELECOMMUTCATION INFORMATION:
TELECOMMUTCATION INFORMATION:
TELEFRAX: (212) 869-9741/8664
TELEFRAX: (212) 869-9741/8664
TELEFRAX: (212) 869-9741/8664
TELEFRAX: 66141 PENNIE
INFORMATION FOR SEG ID NO: 394:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 415-576-0200
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SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 415-576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 274
                                                                                                                                                                                                                                                                                                                                                                                                                                       ; MOLECULE TYPE: peptide
US-08-602-999A-394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      167 LPGLPPA 173
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                                                                                                                                                               0; Indels
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                                                                                                           Length 15;
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                                                                                                                                                                                                                                                                                                                                                                                           Sequence 11, Application US/09009953

Patent No. 6413517

GENERAL INFORMATION:

APPLICANT: Sette, Alessandro

TITLE OF INVENTION: Identification of Broadly

Reactive DR Restricted Epitopes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Diskete
COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTESED for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 60/036,713
FILING DATE: 23-JAN-1997
APPLICATION NUMBER: US 60/036,713
FILING DATE: 23-JAN-1997
APPLICATION NUMBER: US 60/037,432
FILING DATE: 33-JAN-1997
APPLICATION NUMBER: 32,762
REGISTRATION NUMBER: 32,762
REGISTRATION NUMBER: 32,762
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 4;
                                                                                                           DB 4;
                                                                                                        Ouery Match 3.3%; Score 7; DB 4
Best Local Similarity 100.0%; Pred. No. 7.8
Matches 7; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.3%; Score 7; DB 4
100.0%; Pred. No. 7.8
:ive 0; Mismatches
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STRANDEDNES: single
STRANDEDNES: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 11:
US-09-009-953-11
; MOLECULE TYPE; peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 10:
US-09-009-953-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 15 amino acids
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INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.34
Best Local Similarity 100.(
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
                                                                                                                                                                                                                                                  9 SVLAGLL 15
                                                                                                                                                                                                                 16 SVLAGLL 22
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Search completed: July 8, 2005, 22:52:20 Job time : 44 secs

16 SVLAGLL 22

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GenCore version 5.1.6
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OM protein - protein search, using sw model

July 8, 2005, 22:38:19; Search time 40 Seconds (without alignments) 502.733 Million cell updates/sec Run on:

US-10-060-765-4 209 1 MDSDETGFEHSGLWVSVLAG......SSDPLSMVGPSQGRSPSYAS 209 Title: Perfect score: Sequence:

Scoring table: Oligo (Gaport 60.0

283416 segs, 96216763 residues Searched:

0

Word size :

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
i: pir4:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	threonine ammonia-	probable ssdna exo	hypothetical prote			hypothetical prote	phnQ protein - Esc	conserved hypothet		antigen 5.1 precur		antigen 5.1 precur	ical	w	yopB protein - Yer	hypothetical prote		hypothetical prote		hypothetical prote	hypothetical prote	GTP-binding protei		Д	iron(III) dicitrat	probable ABC trans	ferric enterobacti	hypothetical prote	L-arabinose transp
	ID	E75502	H71513	T22943	C75345	S21307	T18135	135719	H75394	F83242	YAZQ51	A25780	A26769	F72565	A83682	S14242	P75200	F83609	E90763	F85626	AB2488	T37029	860768	H82638	D95963	AG2129	A95404	E83126	B87274	AI0274
	DB	2	~	~	N	7	7	~	~	~	_	7	~	7	~	~	~	~	~	0	~	~	~	7	~	~	~	~	~	~
	Length 1	568	584	999	90	92	120	121	146	157	162	162	162	163	208	219	248	250	257	257	262	288	295	302	330	330	332	340	347	349
*	Query Match	3.8	3.8	3.8	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	•	3,3	3,3	3.3	3.3	3.3	3.3
	Score	6	60	80	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	Result No.	-	7	м	4	S	9	7	60	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	53

DNA-directed DNA p granulocyte/macrop conserved hypothet probable PPE prote hypothetical prote transcription fact hypothetical prote probable serine hy hypothetical prote transcription regu hypothetical prote probable MFS trans hypothetical prote hypothetical prote hypothetical prote hypothetical prote
B41870 C69092 C69092 T50882 T50718 T43534 D509811 T43534 D69811 D69811 D69411 D64454 C84454 C84454
0000000000000000
$\begin{array}{c} \omega \; \omega $
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. 0 1 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

## ALIGNMENTS

RESULT 1 B75502
threonine ammonia-lyase (EC 4.3.1.19) DR0567 [similarity] - Deinococcus radiodurans (str
C;Species: Deinococcus radiodurans
C;Date: 03-Dec-1999 #sequence revision 03-Dec-1999 #text change 09-Jul-2004
C;Accession: B75502
R;White, O.; Bisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, R.J.;
, M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, C.; Ma
S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
A; Title: Genome sequence of the radioresistant bacterium Deinococcus radiodurans R1.
A; Reference number: A75250; MUID: 20036896; PMID: 10567266
D. Dordon on . Rickno

A;Accession: E75502 A;Atatus: preliminary A;Atatus: preliminary A;Atatus: preliminary A;Residues: 1-568 «WHI> A;Residues: 1-568 «WHI> A;Cross-references: UNIPROT:Q9RWUB; GB:AE001915; GB:AE000513; NID:g6458262; PIDN:AAF1014 A;Cross-references: UNIPROT:Q9RWUB; GB:AE001915; GB:AE000513; NID:g6458262; PIDN:AAF1014 A;Genetics: A;Genetics: A;Genetics: A;Genetics: C;Superfamily: threonine dehydratase C;Superfamily: threonine dehydratase C;Keywords: ammonia-lyase; carbon-nitrogen lyase; carbon-oxygen lyase; hydro-lyase; phos F;116/Binding site: pyridoxal phosphate (Lys) (covalent) #status predicted

Gaps ö Length 568; 0, Indels Query Match
3.8%; Score 8; DB 2;
Best Local Similarity 100.0%; Pred. No. 8.4;
Matches 8; Conservative 0; Mismatches

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255 LKALKPGV 262 83 LKALKPGV 90 ò 셤

RESULT 2

probable sedna exonuclease - Chlamydia trachomatis (serotype D, strain UW3/Cx) C;Species: Chlamydia trachomatis (c;Species: Chlamydia trachomatis (c;Species: Chlamydia trachomatis (c;Species: 13-Sep-1998 #text_change 09-Ju1-2004 (c;Stephens: H71513 Rscension: H71513 Rscension: R.S.; Kalman, S.; Lammel, C.J.; Fan, J.; Marathe, R.; Aravind, L.; Mitchell, Science 282, 754-759, 1998 A;Title: Genome sequence of an obligate intracellular pathogen of humans: Chlamydia trac A;Reference number: A71570; MUID:99000809; PMID:9784136

A;Status: preliminary A;Molecule type: DNA A;Molecule type: DNA A;Cross-references: UNIPROT:084453; GB:AE001318; GB:AE001273; NID:G3328875; PIDN:AAC6804 A;Experimental source: serotype D, strain UW-3/Cx C;Genetics: A;Gene: recJ

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C,Accession: $21307
R,Davies, S.S.P.; Krishnapillai, V.V.
R,Davies, S.S.P.; Krishnapillai, V.V.
Submitted to the EMBL Data Library, September 1990
A,Description: DMA sequence analysis of the replication region of the Pseudomonas aerugi
A,Reference number: $21306
A,Accession: $21307
                                                                                                                                                                                                                                                                                                                    A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-92 <DAV>
A;Cross-references: UNIPROT:Q51557; EMBL:X54695; NID:g45410; PIDN:CAA38511.1; PID:g45412
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C;Date: O5-Oct-1990 #sequence_revision 05-Oct-1990 #text_change 09-Jul-2004
C;Date: O5-Oct-1990 #sequence_revision 05-Oct-1990 #text_change 09-Jul-2004
C;Accession: 135719
R;Chen, C.M.; Ye, Q.Z.; Zhu, Z.; Wanner, B.L.; Walsh, C.T.
J. Biol. Chem. 265, 4461-4471, 1990
A;Afitle: Wolecular biology of carbon-phosphorus bond cleavage. Cloning and sequencing of A;Reference number: A35718; WUID:90170953; PMID:2155230
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A;Residues: 1-121 <CHE>
A;Cross-references: UNIPROT:P16693; GB:J05260; NID:g147192; PIDN:AAA24357.1; PID:g147214
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A,Residues: 1-120 cGRA
A;Cross-references: UNIPROT:041115; EMBL:U42580; NID:94028896; PIDN:AAC96960.1
A;Experimental source: specific host Chlorella strain NC64A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypothetical protein A633R - Chlorella virus PBCV-1
C;Species: Chlorella virus PBCV-1
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T1813B #Sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
S;Graves, M.V.; Van Btten, J.L.
Submitted to the EMBL Data Library, May 1999
                                 C.Species: Pseudomonas aeruginosa
C.Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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C;Superfamily: Chlorella virus PBCV-1 hypothetical protein A633R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 121;
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A;Accession: T18135
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.3%; Score 7; DB 2; Best Local Similarity 100.0%; Pred. No. 20; Matches 7; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.3%; Score 7; DB 2; Best Local Similarity 100.0%; Pred. No. 16; Matches 7; Conservative 0; Mismatches
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   hypothetical protein - Pseudomonas aeruginosa
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15 LAGLLLG 21
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() Species: Deinococcus radiodurans
() Species: Deinococcus radiodurans
() Species: O3-Dec-1999 #sequence_revision O3-Dec-1999 #text_change O9-Jul-2004
() Accession: C75345
() R. White, O.; Eisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, R.J.;
() M.; Wamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, C.; Ma
() S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
() Science 286, 1571-1577, 1999
() Arities: Genome sequence of the radioresistant bacterium Deinococcus radiodurans R1.
() A. Reference number: A75250; MUID:20036896; PMID:10567266
() A. Accession: C75345
() A. Accession: C75345
() A. Accession: C7545
() A. Acc
                                                                                                                                                                                                                                                                                                                                                                                                                                                           hypothetical protein F58G11.3 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T22943
R;Percy, C.
submitted to the EMBL Data Library, October 1996
A;Reference number: Z19640
A;Accession: T22943
A;Accession: T22943
A;Accession: T22943
A;Accession: F22943
A;Accession: F22943
A;Accession: T22943
A;Residues: 1-666 <WILb>
A;Residues: 1-666 <WILb>
A;Cross-references: UNIPROT:P90898; EMBL:Z81094; PIDN:CAB03154.1; GSPDB:GN00023; CESP:P5
A;Experimental source: clone F58G11
A;Gene: CESP:F58G11.3
A;Map position: 5
A;Introns: 42/2; 82/2; 153/3; 274/3; 380/1; 569/3; 613/3
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                                                                           Length 584;
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C; Superfamily: single-stranded-DNA-specific exonuclease RecJ
                                                                   3.8%; Score 8; DB 2;
100.0%; Pred. No. 8.6;
vative 0; Mismatches
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Best Local Similarity 100.0%; Pred. No. 9.7;
Matches 8; Conservative 0; Mismatches
                                                                                                     Local Similarity 100.
                                                                                                                                                                                                                                                                                  110 QILGVKTS 117
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                                                                       Query Match
                                                                                                             Best Loca
Matches
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S21307
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A; Residues: 1-162 -HOP-
A; Cross-references: UNIPROT: P04926; GB:X01745; NID:g9858; PIDN:CAA25881.1; PID:g758218
A; Cross-references: UNIPROT: P04926; GB:X01745; NID:g9858; PIDN:CAA25881.1; PID:g758218
C; Comment: This antigen may be secreted.
C; Comment: This antigen and the circumsporozoite protein appear to have a common epitope C; Superfamily: plasmodium S-antigen
C; Superfamily: plasmodium S-antigen
C; Reywords: sporozoite; surface antigen; transmembrane protein
F; 1-22/Domain: signal sequence #status predicted <SIG>F; 23-162/Product: antigen 5.1 #status predicted <MAT>F; 76-101/Domain: transmembrane #status predicted <TWM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Diood-stage antigen precursor - malaria parasite (Plasmodium falciparum)
NyAlternate names: exp-1/CRA; vacuole membrane antigen QF116
C;Species: Plasmodium falciparum
C;Date: 29-Aug-1987 #sequence_revision 29-Aug-1987 #text_change 09-Jul-2004
C;Accession: A25780; A60658
R;Coppel, R.L.; Favaloro, J.M.; Crewther, P.E.; Burkot, T.R.; Bianco, A.E.; Stahl, H.D.; Proc. Natl. Acad. Sci. U.S.A. 82, 5121-5125, 1985
A;Title: A blood stage antigen of Plasmodium falciparum shares determinants with the spo A;Reference number: A25780; MUID:85270476; PMID:2410913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: mRNA
A;Residues: 1-162 <COP>
A;Cross-references: UNIPROT: P04923; GB:M11145; NID:g160158; PIDN:AAA29523.1; PID:g160159
A;Cross-references: UNIPROT: P04923; GB:M11145; NID:g160158; PIDN:AAA29523.1; PID:g160159
R;Kara, U.; Murray, B.; Pam, C.; Lahnstein, J.; Gould, H.; Kidson, C.; Saul, A.
A;Ria, U.; Murray, B.; Pam, C.; Lahnstein, J.; Gould, H.; Kidson, C.; Saul, A.
A;Title: Chemical Characterization of the parasitophorous vacuole membrane antigen QF 11
A;Reference number: A60658; MUID:90205955; PMID:1690855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: protein
A;Residues: 23-40 «KAR»
C;Comment: This vacuolar membrane protein is shown to be acylated by incorporation of my ibody binding not to be truncated at the carboxyl terminus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tation 5.1 precursor - malaria parasite (Plasmodium falciparum)
C;Species: Plasmodium falciparum
C;Species: 19-Nov-1988 #sequence_revision 03-Jun-1993 #text_change 09-Jul-2004
C;Accession: A26769
R;Simmons, D.; Woollett, G.; Bergin-Cartwright, M.; Kay, D.; Scaife, J.
EMBO J. 6, 485-491, 1987
A;Title: A malaria protein exported into a new compartment within the host erythrocyte.
A;Reference number: A26769; MUD:87218504; PMID:2438130
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C;Keywords: membrane protein; myristylation; surface antigen
C;Keywords: membrane protein; myristylation; surface antigen
F;1-22/Domain: signal sequence #status predicted <SIG>
F;23-162/Product: blood-stage antigen #status experimental <MAT>
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100.0%; Pred. No. 27;
ive 0; Mismatches 0; Indels
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A;Residues: 1-162 <SIM>
                                        A; Molecule type: mRNA
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A; Accession: A23052
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Matches
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                                                                                                                                                    Conserved hypothetical protein - Deinococcus radiodurans (strain R1)
Cispecies: Deinococcus radiodurans
Cispecies: Deinococcus radiodurans
Cispecies: Deinococcus radiodurans
Cispecies: O3-Dec-1999 #sequence_revision O3-Dec-1999 #text_change O9-Jul-2004
Cispecies: O3-Dec-1999 #sequence_revision O3-Dec-1999 #text_change O9-Jul-2004
Cispecies: O3-Dec-1999 #sequence O5-Dec-1999 #text_change O9-Jul-2004
R;White, O.; Eisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, R.J.;
S.; Smith, H.O.; Vanathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, C.; Ma
S.; Smith, H.O.; Vanathevan, J.J.; Fraser, C.M.
Science 286, 1571-1577, 1999
A;Title: Genome sequence of the radioresistant bacterium Deinococcus radiodurans R1.
A;Reference number: A75250; MUID:20036896; PMID:10567266
A;Accession: H75394
A;Acces
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Cipate: 15-8ep-2000 #sequence_revision 15-8ep-2000 #text_change 09-Jul-2004
Ristover, C.K.; Pham, X.O.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hickey, M.J.; Br
adman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.; Lim,
.; Lory, S.; Olson, W.V.
Nature 406, 359-964, 2000
A; Title: Complete genome sequence of Pseudomonas aeruginosa PA01, an opportunistic pathor
A; Accession: P83242
A; Accession: P83242
A; Accession: P83242
A; Accession: P83242
A; Residues: L-157 < ATO>
A; Cross-references: UNIPROT; O9HZ22; GB:AE004745; GB:AE004091; NID:g9949336; PIDN:AAG0660
A; Cross-references: Etrain PA01
C; Genetics:
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C;Species: Plasmodium falciparum
C;Species: Plasmodium falciparum
C;Date: 30-Sep-1987 #sequence_revision 30-Sep-1987 #text_change 09-Jul-2004
C;Accession: A23052
R;Hope, I.A.; Mackay, M.; Hyde, J.E.; Goman, M.; Scaife, J.
R;Hope, I.A.; Mackay, M.; Hyde, J.E.; Goman, M.; Scaife, J.
A;Title: The gene for an exported antigen of the malaria parasite Plasmodium falciparum
A;Reference number: A23052; MUID:85215483; PMID:2582354
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100.0%; Pred. No. 24;
iive 0; Mismatches
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100.0%; Pred. No. 26;
ive 0; Mismatches
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Query Match

Best Local Similarity 100.0

Matches 7; Conservative
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Best Local Similarity 100.7
Matches 7; Conservative
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182 GTVGGAA 188
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P72565
hypothetical protein APE1808 - Aeropyrum pernix (strain K1)
C;Species: Aeropyrum pernix
C;Decies: 20-Aug-1999 #text_change 09-Jul-2004
C;Accession: P72565
R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; Takah awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Jan-no, K.; Takah awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Jan-no, K.; Takah awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; Komi awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; Komi awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; Katerence number: A72565
A;Retus: preliminary
A;Molecule type: DNA
A;Residues: L163 <AM>A;Residues: L163 <AM>A;Residues: L163 <AM>A;Residues: UNIPROT:Q9YAY7; DDBJ:AP000062; NID:g5105244; FIDN:BAA80811.1; PID:d1
A;Experimental source: strain K1
C;Genetics:
A;Genetics:
A;Geneti
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C; Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 09-Jul-2004
C; Accession: A83682
Nucleic Acids Res. 28, 4317-4331, 2000
A; Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and A; Reference number: A83682
A; Status: preliminary
A; Accession: A83682
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-208 <STO>
A; Cross-references: UNIPROT: Q9KG56; GB: AP001507; GB: BA000004; NID: g10172612; PIDN: BAB039 C; Genetics:
A;Cross-references: UNIPROT:P04926; GB:X05074; NID:99890; PIDN:CAA28735.1; PID:99891 A;Note: the authors translated the codon GTT for residue 10 as Ala C;Superfamily: plasmodium S-antigen C;Superfamily: plasmembrane protein
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C;Superfamily: Ni2+-binding GTPase ([NiFe]-hydrogenase/urease maturation factor)
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                                                                                                                                                                                                                   Length 162;
                                                                                                                                                                                                                                                                                                         0; Indels
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A;Molecule type: DNA
A;Residues: 1-219 <MIC>
A;Cross-references: UNIPROT:P31492; EMBL:M92066; NID:g155528; PIDN:AAA19862.1; PID:g1555
A;Experimental source: strain W22703 serotype O:9
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                           C;Species: Yersinia enterocolitica
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 09-Jul-2004
C;Accession: S14242
R;Michiels, T.; Wattiau, P.; Brasseur, R.; Ruysschaert, J.M.; Cornelis, G.
Infect. Immun. 58, 2840-2849, 1990
A;Title: Secretion of Yop proteins by Yersiniae.
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YopE protein - Yersinia enterocolitica virulence plasmid pYVe439-80
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A;Genome: plasmid pYVe439-80
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July 8, 2005, 22:50:52; Search time 164 Seconds (without alignments) 492.336 Million cell updates/sec
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1 MDSDETGFEHSGLWVSVLAG......SSDPLSMVGPSQGRSPSYAS 209
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| cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
| cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
| cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
| cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
| cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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Maximum DB seq length: 2000000000
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	Sequence 24, Appl	Sequence 15, Appl	Sequence 15, Appl	Sequence 4, Appli	Sequence 24, Appl	Sequence 4, Appli	Sequence 4, Appli	Sequence 68, Appl	Sequence 70, Appl	Sequence 66, Appl	Sequence 2, Appli
A	US-09-822-485-24	US-09-801-968-15	US-09-802-154-15	US-10-060-765-4	US-10-374-207-24	US-10-818-140-4	US-10-771-173-4	US-10-659-004-68	US-10-659-004-70	US-10-659-004-66	US-09-755-695-2
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Length	209	209	209	209	209	209	209	209	209	209	208
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188         90.0         208         14         US-10-227-884-78         Sequence 78         Appl           188         90.0         208         14         US-10-230-38-78         Sequence 78         Appl           188         90.0         208         14         US-10-230-318-78         Sequence 78         Appl           188         90.0         208         14         US-10-230-41-78         Sequence 78         Appl           188         90.0         208         14         US-10-230-24-78         Sequence 78         Appl           188         90.0         208         14         US-10-230-24-78         Sequence 78         Appl           188         90.0         208         14         US-10-230-43-78         Sequence 78         Appl           188         90.0         208         14         US-10-230-43-78         Sequence 78         Appl           188         90.0         208         14         US-10-230-43-78         Sequence 78         Appl           188         90.0         208         14         US-10-219-46-78         Sequence 78         Appl           188         90.0         208         14         US-10-219-46-78         Sequence 78         Appl<	ALIGNMENTS  SULT 1  -09-822-485-24  Sequence 24, Application US/09822485  Patent No. US20020001825A1  GENERAL INFORMATION:  GENERAL INFORMATION:  TITLE OF INVENTION:  TITLE OF INVENTION:  TITLE OF INVENTION:  TO US 020020001825A1e1 Fibroblast Growth Factor-Like Polypeptides  FILE REPERANCE:  TO US 020020001825A1e1 Fibroblast Growth Factor-Like Polypeptides  CURRENT APPLICATION NUMBER:  US/09/822,485  CURRENT FILING DATE:  SOOT NO 24  LENGTH 209  TERMENT 209  TYPE:  ORGANISM: Homo sapiens  FUBLICATION INFORMATION:  JOURNAL: Blochim: Blophys: Acta  DATE: 2000  -09-822-485-24	tch 100.0%; Score 209; DB 9; Length 209; al Similarity 100.0%; Pred. No. 4e-185; 209; Conservative 0; Mismatches 0; Indels 0; Gaps 0; 1 MDSDETGFEHSGLWVSVLAGILLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH 60
122 124 133 135 138 138 138 138 138 138 138 138 138 138	RESULT 1 US-09-82-485-24, 8 Sequence 24, A Patent No. US2 GENERAL INFORM TITLE OF INVE FILE REFERENC CURRENT FILIN CURRENT PILIN CURRENT PILIN FURBER OF SE SOFTWARE: PA CURRENT FILIN TYPE: PRT ORGANISM: HO PUBLICATION I CURRALLE TYPE: PRT ORGANISM: HO DUBLALLINION I JUURNAL: B1 DUBLALINION I DUBLALINION I DUBLALINION I DUBLALINION I DUBLALINION I	Query Match Best Local ( Matches 20) Qy 1 Db 1

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100.0%; Score 209; DB 9; Length 209;
Best Local Similarity 100.0%; Pred. No. 4e-185;
Matches 209; Conservative 0; Mismatches 0; Indels
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Sequence 15, Application US/09802154

Sequence 15, Application US/09802154

Sequence 15, Application US 003010530241

GENERAL INFORMATION:

APPLICANT: Kavanaugh, W. Michael

TITLE OF INVENTION: HUMAN FGF-23 GENE AND GENE EXPRESSION

TITLE OF INVENTION: HUMAN FGF-23 GENE AND GENE EXPRESSION

TITLE OF INVENTION: PRODUCTS

FILE REFERENCE: PP-17149.001/201130.409

CURRENT APPLICATION NUMBER: US/09/802,154

CURRENT PLING DATE: 2001-03-07

NUMBER OF SEQ ID NOS: 46

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 15

LENGTH: 209
                                                                                                                                                                             Sequence 15, Application US/09801968

Patent No. US20020082205A1

GENERAL INPORMATION:
APPLICANT: Itch, No. US20020082205Aluyuki
APPLICANT: Kavanaugh, W. Michael
TITLE OF INVENTION: HUMAN FGF-23 GENE AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS
TITLE OF INVENTION: PRODUCTS
CURRENT APPLICATION NUMBER: US/09/801,968
CURRENT FILING DATE: 2001-03-07
NUMBER OF SEQ ID NOS: 46
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 15
LENTH: 209
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US-09-801-968-15
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ORGANISM: Homo sapiens
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APPLICANT: Itch, No. US20030170822Aluyuki
APPLICANT: Itch, No. US20030170822Aluyuki
TITLE OF INVENTION: Fibroblast Growth Factor-Like Molecules and Uses Thereof
FILE REFERENCE: 08035.0001-02000
CURRENT APPLICATION NUMBER: US,10/374,207
PRIOR APPLICATION NUMBER: US 09/822,485
PRIOR FILING DATE: 2001-04-02
PRIOR PLING DATE: 2001-04-02
PRIOR APPLICATION NUMBER: US 09/540,118
                                                                                                              61 LEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA 120
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; Publication No. US20020164713A1
; GENERAL INPORMATION:
; APPLICANT: Itoh, No. US20020164713Aluyuki
; APPLICANT: Itoh, No. US20020164713Aluyuki
; TITLE OF INVENTION: HWAN FOF-21 GENE AND GENE EXPRESSION
; TITLE OF INVENTION: PRODUCTS
; FILE REPERBNCE: PP-16758.001/201130.408
; CURRENT APPLICATION NUMBER: US/10/060,765
; CURRENT FILING DATE: 2002-01-29
; PRIOR APPLICATION NUMBER: US/09/715,805
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
LENGTH: 209
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ORGANISM: Homo sapiens
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100.0%; Score 209; DB 14; Length 209;
Best Local Similarity 100.0%; Pred. No. 4e-185;
Matches 209; Conservative 0; Mismatches 0; Indels 0
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Publication No. US200401854941

GENERAL INFORMATION:
APPLICANT: Itoh, Nobuyuki
APPLICANT: Revanaugh, W. Michael
TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS.
FILE REPERENCE: PP-16758.001/201130.408
CURRENT APPLICATION NUMBER: US/10/818,140
CURRENT FILING DATE: 2004-04-05
PRIOR APPLICATION NUMBER: US/09/715,805
PRIOR FILING DATE: 2000-11-16
NUMBER OF SEQ ID NOS: 17
SEQ ID NOS: 17
SEQ ID NOS: 17
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                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
PUBLICATION INFORMATION:
JOURNAL: Biochim. Biophys. Acta
DATE: 2000
PRIOR FILING DATE: 2000-03-31
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn Ver. 2.0
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ORGANISM: Homo sapiens
US-10-818-140-4
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                                                                  SEQ ID NO 24
LENGTH: 209
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US-10-659-004-68

US-10-659-004-68

US-10-659-004-68

Sequence 68, Application US/10659004

Sequence 68, Application US/10659004

Sequence 68, Application No. US2050048507A1

GENERAL INFORMATION:

APPLICANT: Zhong et al.

TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOD FILE REFERENCE: 2003-09-09

CURRENT APPLICATION NUMBER: 60/295, 607

PRIOR FILING DATE: 2001-06-04

PRIOR FILING DATE: 2001-06-04

PRIOR APPLICATION NUMBER: 60/295, 404

PRIOR APPLICATION NUMBER: 60/296, 418

PRIOR APPLICATION NUMBER: 60/297, 414

PRIOR PILING DATE: 2001-06-01

PRIOR APPLICATION NUMBER: 60/297, 414

PRIOR FILING DATE: 2001-06-11

PRIOR APPLICATION NUMBER: 60/297, 567

PRIOR APPLICATION NUMBER: 60/297, 567

PRIOR APPLICATION NUMBER: 60/297, 567

PRIOR APPLICATION NUMBER: 60/299, 585

PRIOR APPLICATION NUMBER: 60/299, 585

PRIOR APPLICATION NUMBER: 60/299, 585

PRIOR PILING DATE: 2001-06-15

PRIOR PILING DATE: 2001-06-15
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                                                                                                                       ## Sequence 4, Application US/10771173

## Sequence 4, Application US/10771173

## Publication No. US20050037457A1

## GENERAL INFORMATION:

## APPLICANT: Kavanaugh, W. Michael

## ITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION

## TITLE OF INVENTION: PRODUCTS

## FILE REPERENCE: PP-16758.001/201130.408

## CURRENT APPLICATION NUMBER: US/10/771,173

## CURRENT FILING DATE: 2004-02-03

## RIOR APPLICATION NUMBER: US/09/715,805

## RIOR APPLICATION NUMBER: US/09/715,805
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100.0%; Pred. No. 4e-185;
tive 0; Mismatches 0
181 LAPQPPDVGSSDPLSMVGPSQGRSPSYAS 209
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.1
Matches 209; Conservative
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-771-173-4
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US-10-659-004-66

Sequence 66, Application US/10659004

GENERAL INFORMATION:
TITLE OF INVENTION: THERREUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOD
FILE REFERENCE: 21402-608
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CURRENT FILING DATE: 2003-09-09

PRIOR APPLICATION NUMBER: 60/295,607

PRIOR APPLICATION DATE: 2001-06-04

PRIOR PILING DATE: 2001-06-04

PRIOR PILING DATE: 2001-06-04

PRIOR FILING DATE: 2001-06-06

PRIOR FILING DATE: 2001-06-06

PRIOR PILING DATE: 2001-06-06

PRIOR PILING DATE: 2001-06-06

PRIOR PILING DATE: 2001-06-06

PRIOR PILING DATE: 2001-06-01

PRIOR PILING DATE: 2001-06-01

PRIOR PILING DATE: 2001-06-12

PRIOR PILING DATE: 2001-06-15

PRIOR PILING DATE: 2001-06-26

PRIOR PILING DATE: 2009-06-26

PRIOR PILING DATE: 2001-06-26

PRIOR PI
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                                  Gaps
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Pred. No. 2.2e-169;
         Pred. No. 1.4e-179;
100.0%; Preq. .v.
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         Best Local Similarity 100.0
Matches 203; Conservative
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US-10-659-004-66
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         PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/300,883
PRIOR FILING DATE: 2001-16-26
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 187
SOFTWARE: CuraSequist version 0.1
SEQ ID NO 68
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                                                                                                                                                                                                                                                                                                 Length 209;
                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                 97.1%; Score 203; DB 17; L
100.0%; Pred. No. 1.4e-179;
iive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     187 DVGSSDPLSMVGPSQGRSPSYAS 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     187 DVGSSDPLSMVGPSQGRSPSYAS 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Sequence 70, Application US/10659004; Publication No. US20050048507A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                    Query Match 97.1
Best Local Similarity 100.
Matches 203; Conservative
                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Homo sapiens
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ORGANISM: Homo sapiens
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US-10-659-004-70
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                                                                                                                                                                                    LENGTH: 209
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FILING DATE: 1997-10-28
APPLICATION NUMBER: 60/064103
FILING DATE: 1997-10-31
APPLICATION NUMBER: 60/069873
FILING DATE: 1997-12-17
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APPLICATION NUMBER: 60/063549
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FILING DATE: 1998-09-10
APPLICATION NUMBER: 60/099816
FILING DATE: 1998-09-10
                                                                                                                                                                                                             FILING DATE: 1997-12-17
APPLICATION NUMBER: 60/078910
                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/079294
FILING DATE: 1998-03-25
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APPLICATION NUMBER: 60/079728
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081955
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APPLICATION NUMBER: 60/08441
FILING DATE: 1998-05-06
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FILING DATE: 1998-05-15
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LING DATE: 1998-06-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/090691
FILING DATE: 1998-06-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/090695
FILING DATE: 1998-06-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PPLICATION NUMBER: 60/096146
ILING DATE: 1998-08-11
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FILING DATE: 1998-08-26
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FILING DATE: 1998-09-09
                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/085323
FILING DATE: 1998-05-13
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IG DATE: 1998-06-24
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FILING DATE: 1998-08-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/091982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/098544
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/099811
                                                                                                                                                                                                                                                                 FILING DATE: 1998-03-20
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                                                      -10-17
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138 BAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMV 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              82 QLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAHG 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81 QLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPRACSFRELLLEDGYNVYQSEAHG 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141 LPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSWVGPSQ 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMVGPSQ 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 LIGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESLL 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Gurney, Austin L.
APPLICANT: Smith, Victoria
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Washansh, Colin L.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22 LLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLBIREDGTVGGAADQSPESLL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 90.0%; Score 188; DB 9; Le
Best Local Similarity 100.0%; Pred. No. 1.1e-165;
Matches 188; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                      Sequence 2, Application US/09755695;
Patent No. US20020081663A1
GENERAL INFORMATION:
APPLICANT: CONKLIN, Darrell C.
APPLICANT: Chen, Zhi
ITLE OF INVENTION: NOVEL FGF HOMOLOG ZFGF11
FILE REFERENCE: 00-03
CURRENT FILING DATE: 2001-05-11
PRIOR APPLICATION NUMBER: US/09/755,695
CURRENT FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 208
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 78, Application US/1027884
Publication No. US200300279881
GENERAL INFORMATION:
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                                                   198 GPSQGRSPSYAS 209
                                                                                 198 GPSQGRSPSYAS 209
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Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Goddard, Audrey
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
CORGANISM: Homo sapiens
US-09-755-695-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ||||||||||
GRSPSYAS 208
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US-09-755-695-2
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RELING DATE: 1998-09-23

RAPELICATION NUMBER: 60/101738

RELING DATE: 1998-09-24

RELING DATE: 1998-09-25

RELING DATE: 1998-09-25

RELING DATE: 1998-09-25

RELING DATE: 1998-09-27

RELING DATE: 1998-09-24

RELING DATE: 1998-09-24
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NR APPLICATION NUMBER: 60/106905

NR FILING DATE: 1998-11-03

NR APPLICATION NUMBER: 60/108901

NR FILING DATE: 1998-11-17

NR FILING DATE: 1998-11-17

NR PILING DATE: 1998-11-17

NR APPLICATION NUMBER: 60/108849

NR APPLICATION NUMBER: 60/108849

NR APPLICATION NUMBER: 60/11242

NR APPLICATION NUMBER: 60/11242

NR APPLICATION NUMBER: 60/11242

NR FILING DATE: 1998-12-15

NR FILING DATE: 1998-12-22

NR APPLICATION NUMBER: 60/11396
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R APPLICATION NUMBER: 60/113621

R FILING DATE: 1998-12-23

R FILING DATE: 1998-12-23

R FILING DATE: 1998-10-12

R FILING DATE: 1999-01-12

R FILING DATE: 1999-01-12

R APPLICATION NUMBER: 60/11558

R FILING DATE: 1999-01-12

R APPLICATION NUMBER: 60/11549

R FILING DATE: 1999-02-10

R APPLICATION NUMBER: 60/12549

R FILING DATE: 1999-03-10

R APPLICATION NUMBER: 60/12559

R FILING DATE: 1999-03-10

R APPLICATION NUMBER: 60/12559

R FILING DATE: 1999-03-19

R APPLICATION NUMBER: 60/126775

R APPLICATION NUMBER: 60/126773

R APPLICATION NUMBER: 60/126773

R APPLICATION NUMBER: 60/126773

R APPLICATION NUMBER: 60/126773
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FILING DATE: 1999-04-27
APPLICATION NUMBER: 60/131445
APPLICATION NUMBER: 60/100385
FILING DATE: 1998-09-15
APPLICATION NUMBER: 60/100390
FILING DATE: 1998-09-15
APPLICATION NUMBER: 60/100627
                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/100919
FILING DATE: 1998-09-17
APPLICATION NUMBER: 60/101477
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FILING DATE: 1999-04-21
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FILING DATE: 1998-09-18
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FILING DATE: 1999-04-05
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APPLICATION NUMBER: 60/106464
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                                  PRIOR PRIOR
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APPLICANT: Basker, Kevin P.
APPLICANT: Besnoyers, Ind
APPLICANT: Gerritsen, Mary
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Smith, Victorian
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Matanabe, Colin L.
APPLICANT: Watanabe, Colin L.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACLISE ENCODING THE SAME
FILE REFERENCE: P35330PIC96
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Pred. No. 1.1e-165;
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PRIOR APPLICATION NUMBER: 60/134287
PRIOR FILING DATE: 1999-05-14
PRIOR PELING DATE: 1999-06-21
PRIOR PELING DATE: 1999-06-22
PRIOR PELING DATE: 1999-06-23
PRIOR PELING DATE: 1999-06-23
PRIOR APPLICATION NUMBER: 60/14569
PRIOR PELING DATE: 1999-07-26
PRIOR PELING DATE: 1999-07-26
PRIOR PELING DATE: 1999-07-26
PRIOR PELING DATE: 1999-08-17
PRIOR PELING DATE: 1999-11-09
PRIOR PELING DATE: 1999-12-07
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Publication No. US20030036635A1
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NUMBER: US/10/ : 2002-08-28 UMBER: 10/119, 4 UMBER: 60/05911 1997-09-17 UMBER: 60/0628 1997-10-17 UMBER: 60/06354 UMBER: 60/06354 UMBER: 60/06354 UMBER: 60/06316	NUMBER: 60 1998-03-2 NUMBER: 60 1998-03-2 1998-04-1 1998-04-1 NUMBER: 60 1998-04-1 NUMBER: 60 1998-04-1 NUMBER: 60 1998-05-0 NUMBER: 60 1998-05-0 NUMBER: 60 1998-05-0 NUMBER: 60 1998-05-0 NUMBER: 60 1998-05-0 NUMBER: 60 1998-05-0 NUMBER: 60 1998-05-0 NUMBER: 60 1998-05-0 NUMBER: 60 1998-05-0 NUMBER: 60	NUMBER: 60/090 1998-06-24 1998-06-24 1998-06-24 1998-06-25 NUMBER: 60/090 1998-06-25 NUMBER: 60/090 1998-06-05 NUMBER: 60/095 1998-08-04 NUMBER: 60/095 1998-08-10 1998-08-10 1998-08-10 1998-08-10 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17 1998-08-17
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CURRENT PRIOR P	PRICAL PR	PRIOR

R FILING DATE: 1998-09-10
R APPLICATION NUMBER: 60/099812
R FILING DATE: 1998-09-10
R PELLICATION NUMBER: 60/099816
R FILING DATE: 1998-09-10
R APPLICATION NUMBER: 60/100038
R FILING DATE: 1998-09-11
R APPLICATION NUMBER: 60/100385
R FILING DATE: 1998-09-15 R APPLICATION NUMBER: 60/113296
R FILING DATE: 1998-12-22
R FILING DATE: 1998-12-23
R APPLICATION NUMBER: 60/113605
R FILING DATE: 1998-12-23
R APPLICATION NUMBER: 60/113621
R FILING DATE: 1998-01-12
R FILING DATE: 1999-01-12
R FILING DATE: 1999-01-12
R RILING DATE: 1999-01-12
R APPLICATION NUMBER: 60/115565
R FILING DATE: 1999-01-12
R APPLICATION NUMBER: 60/115679
R APPLICATION NUMBER: 60/115679
R APPLICATION NUMBER: 60/12529
R APPLICATION NUMBER: 60/12529
R APPLICATION NUMBER: 60/12529
R APPLICATION NUMBER: 60/12575
R APPLICATION NUMBER: 60/126775
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R APPLICATION NUMBER: 60/126773
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R APPLICATION NUMBER: 60/126773
R R FILING DATE: 1999-03-23
R R FILING DATE: 1999-04-05 R FILING DATE: 1998-09-23
R APPLICATION NUMBER: 60/101738
R PILING DATE: 1998-09-24
R APPLICATION NUMBER: 60/101741
R FILING DATE: 1998-09-24
R APPLICATION NUMBER: 60/101786
R PILING DATE: 1998-09-25 R APPLICATION NUMBER: 60/106905
R PILING DATE: 1998-11-03
R APPLICATION NUMBER: 60/108787
R PILING DATE: 1998-11-17
R APPLICATION NUMBER: 60/108801
R PILING DATE: 1998-11-17 1998-09-10 NIMBER: 60/099812 APPLICATION NUMBER: 60/100848 FILING DATE: 1998-09-18 APPLICATION NUMBER: 60/100919 PILING DATE: 1998-09-17 APPLICATION NUMBER: 60/101477 APPLICATION NUMBER: 60/106178 FILING DATE: 1998-10-28 APPLICATION NUMBER: 60/106248 FILING DATE: 1999-04-05
APPLICATION NUMBER: 60/130232
FILING DATE: 1999-04-21
APPLICATION NUMBER: 60/131022
FILING DATE: 1999-04-26 FILING DATE: 1998-09-15 APPLICATION NUMBER: 60/100627 FILING DATE: 1998-09-16 APPLICATION NUMBER: 60/101916 FILING DATE: 1998-09-24 APPLICATION NUMBER: 60/101922 FILING DATE: 1998-09-24 FILING DATE: 1998-10-29 APPLICATION NUMBER: 60/106464 FILING DATE: 1998-10-30 APPLICATION NUMBER: 60/108849 FILING DATE: 1998-11-18 APPLICATION NUMBER: 60/112422 FILING DATE: 1998-12-15 PRIOR PRIOR PRIOR

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APPLICANT: Watanabo, Colin L.

APPLICANT: Watanabo, Colin L.

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

TITLE OF INVENTION: ACIDS ENCODING THE SAME

TITLE OF INVENTION NUMBER: US/10/230,338

CURRENT APPLICATION NUMBER: US/10/230,338

CURRENT FILING DATE: 2002-04-09

PRIOR PLING DATE: 1997-09-17

PRIOR PLING DATE: 1997-09-17

PRIOR PLING DATE: 1997-01-7

PRIOR PLING DATE: 1997-10-17

PRIOR PLING DATE: 1997-10-28

PRIOR PLING DATE: 1997-10-31

PRIOR PLING DATE: 1997-10-31

PRIOR PLING DATE: 1997-12-17

PRIOR PLING DATE: 1998-03-20

PRIOR PLING DATE: 1998-03-20

PRIOR PLING DATE: 1998-03-25

PRIOR PLING DATE: 1998-03-26

PRIOR PLING DATE: 1998-03-26

PRIOR PLING DATE: 1998-03-27

PRIOR PLING DATE: 1998-03-27
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APPLICANT: Besnoyers, Luc
APPLICANT: Genoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Smith, Victoria
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Watanabe, Colin L.
APPLICANT: Watanabe, Colin L.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
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NUMBER OF SEQ ID NOS: 246
SEQ ID NO 78
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100.0%; Pred. No. 1.1e-165;
live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 78, Application US/10218631 Publication No. US20030045687A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.
Matches 188; Conservative
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GRSPSYAS 208
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US-10-230-338-78
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APPLICANT: Deenoyers, Luc
APPLICANT: Gerritsen, Mary
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grinaldi, J. Christopher
APPLICANT: Gurney, Austin L.
APPLICANT: Smith, Victoria
                                                                                                                                           RELING DATE: 1999-05-14

RELING DATE: 1999-06-14

RELING DATE: 1999-06-22

RELING DATE: 1999-06-22

RELING DATE: 1999-06-22

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RELING DATE: 1999-07-20

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RELING DATE: 1999-07-28

RELING DATE: 1999-08-03

RELING DATE: 1999-08-17

RELING DATE: 1999-08-17

RELING DATE: 1999-08-17

RELING DATE: 1999-08-17
             R FILING DATE: 1999-04-27
R APPLICATION NUMBER: 60/131291
R FILING DATE: 1999-04-27
A PPLICATION NUMBER: 60/131445
R FILING DATE: 1999-04-28
R APPLICATION NUMBER: 60/134287
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FILING DATE: 1999-11-09
APPLICATION NUMBER: 60/166361
FILING DATE: 1999-11-16
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FILING DATE: 1999-12-07
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FILING DATE: 1999-12-07
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Matches 188; Conservative
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                                                               CURRENT FILING DATE: 2002-04-09

PRIOR APPLICATION NUMBER: 10/119,480

PRIOR APPLICATION NUMBER: 10/119,480

PRIOR PILING DATE: 2002-04-09

PRIOR PILING DATE: 1997-09-17

PRIOR PELING DATE: 1997-09-17

PRIOR APPLICATION NUMBER: 60/06287

PRIOR PILING DATE: 1997-10-17

PRIOR APPLICATION NUMBER: 60/064103

PRIOR PILING DATE: 1997-10-18

PRIOR APPLICATION NUMBER: 60/064103

PRIOR PILING DATE: 1997-11-17

PRIOR APPLICATION NUMBER: 60/069873

PRIOR PILING DATE: 1997-12-17

PRIOR PILING DATE: 1998-03-20

PRIOR PILING DATE: 1998-03-26

PRIOR PILING DATE: 1998-03-26

PRIOR PILING DATE: 1998-03-26

PRIOR PILING DATE: 1998-03-26

PRIOR APPLICATION NUMBER: 60/079284

PRIOR PILING DATE: 1998-03-26

PRIOR APPLICATION NUMBER: 60/079286

PRIOR PILING DATE: 1998-03-26

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90.0%; Score 188; DB 14; Length 208;
Best Local Similarity 100.0%; Pred. No. 1.1e-165;
Matches 188; Conservative 0; Mismatches 0; Indels
FILE REFERENCE: P3530P1C14
CURRENT APPLICATION NUMBER: US/10/218,631
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CRGANISM: Homo Sapien

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Sequence 2, Application US/09390207
Patent No. 6504530
GENERAL INFORMATION:
APPLICANT: Liu, Bensian
TITLE OF INVENTION: Fibroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 99-371
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2, Appli
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5213, Ap
                                                                  July 8, 2005, 22:04:53; Search time 70.5375 Seconds (without alignments) 221.182 Million cell updates/sec
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2. /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

3. /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4. /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5. /cgn2_6/ptodata/1/iaa/PcTUS_COMB.pep:*

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Compugen Ltd
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US-09-905-125A-59
US-09-902-775A-59
US-09-906-700-59
US-09-904-906-700-59
US-09-904-920A-59
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.09-417-721-7
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Maximum Match 100%
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0A-11 Sequence 11, Appl 2B-11 Sequence 11, Appl 2B-14 Sequence 14, Appl 2-13 Sequence 15, Appl 2-12 Sequence 11, Appl 2-12 Sequence 11, Appl 25-11 Sequence 11, Appl 25-12 Sequence 11, Appl 25-12 Sequence 11, Appl 25-12 Sequence 11, Appl 25-12 Sequence 21, Appl 25-12 Sequence 21, Appl 25-14 Appl	GENE EXPRESSION	100.0%; Score 1113; DB 4; Length 209;  imilarity 100.0%; Pred. No. 2.6e-100;  Conservative 0; Mismatches 0; Indels 0; Gaps 0  MDSDETGFEHSGLWVSVLAGLILGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH 60  MDSDETGFEHSGLWVSVLAGLILGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH 60  MDSDETGFEHSGLWVSVLAGLILGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH 60  LEIREDGTVGGAADQSPESILQLKALKPGV1QILGVKTSRFLCQRPDGALYGSLHPDPRA 120  LEIREDGTVGGAADQSPESILQLKALKPGV1QILGVKTSRFLCQRPDGALYGSLHPDPRA 120  LEIREDGTVGGAADQSPESILQLKALKPGV1QILGVKTSRFLCQRPDGALYGSLHPDPRA 120  CSPRELLLEDGTVVGGAADQSPESILQLKALKPGV1QILGVKTSRFLCQRPDGALYGSLHPDPRA 120  CSPRELLLEDGTVVGSAHGLPLHLPGNKSPHRDPARGPARFLPLPGLPPALPBEPGI 180  CSFRELLLEDGTNVYQSRAHGLPLHLPGNKSPHRDPARGPARFLPLPGLPPALPBEPGI 180  CSFRELLLEDGTNVYQSRAHGLPLHLPGNKSPHRDPARGPARFLPLPGLPPALPBEPGI 180  LAPQPPDVGSSDPLSMVGPSQGRSPSYAS 209  LAPQPPDVGSSDPLSMVGPSQGRSPSYAS 209
1 US-08-464-590A-11 1 US-08-462-169B-11 2 US-08-201-412B-14 2 US-08-201-822-35 3 US-09-103-079-11 3 US-09-103-079-11 3 US-09-093-585-11 3 US-09-368-951-35 4 US-09-368-951-35 4 US-09-390-207-18 4 US-09-390-207-18 4 US-09-390-449-35 4 US-09-390-41-35 4 US-09-390-41-35 4 US-09-32-41-35 4 US-09-32-41-31-31-31-31-31-31-31-31-31-31-31-31-31	AND 08 , 805 4.0	imilarity 100.0%; Score 1113; Dinlarity 100.0%; Pred. No. 2.6e; Conservative 0; Mismatches of Mismat
5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	-4 Application 6716626 ORMATION: TLOh, NO. 67 KAYANAUGH, NVENTION: HUM WYENTION: PP. ENCE: PP.1675 FILING DATE: 2 SEQ ID NOS: 1 FASTSEQ for W HOMO Sapiens HOMO Sapiens	ω o
28 1777 29 1777 31 1777 32 1777 33 1777 34 1777 36 1777 41 1777 44 1777 45 1777	RESULT 1 US-09-715-805-4 i Sequence 4, Applicati i Patent No. 6716626 i GENERAL INFORMATION i APPLICANT: Itch, No. 7 ITILE OF INVENTION: 7 ITILE OF INVENT	Query Match         Best Local         Matches       203         Qy       1         Db       61         Db       61         Qy       121         Qy       121         Qy       121         Db       121         Qy       181         Db       181

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99.4%; Score 1106; DB 4;
Best Local Similarity 99.5%; Pred. No. 1.3e-99;
Matches 208; Conservative 0; Mismatches 1;
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Best Local Similarity 99.4%; Pred. No. 2e-85;
Matches 180; Conservative 0; Mismatches
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; CURRENT APPLICATION NUMBER: US/09/390,207; CURRENT FILING DATE: 1999-09-07; NUMBER OF SEQ ID NOS: 41; SOFTWARE: Patentin Ver. 2.0; SEQ ID NO 2; LENGTH: 209; TYPE: PATENTY: ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Homo sapiens
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RESULT 4 US-09-390-207-4

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72 GAAHRSPESILELKALKPGVIQILGVKASRFLCQQPDGALYGSPHFDPEACSFRELLLED
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; Sequence 4, Application US/09390207; Patent No. 6504530; GENERAL INFORMATION: GENERAL INFORMATION: APPLICANT: Thomason, Arlen; APPLICANT: Liu, Benxian; TILE OF INVENTION: Fibroblast Growth Factor-Like Polypeptides; TILE REPERENCE: 99-371
; CURRENT APPLICATION NUMBER: US/09/390,207
; CURRENT FILING DATE: 1999-09-07
; NUMBER OF SEQ ID NOS: 41
; SEQ ID NO 4
; LENTH: 210
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; Sequence 2, Application US/09715805
; Patent No. 6716626
; GENERAL INFORMATION:
APPLICANT: Itoh, No. 6716626uyuki
; APPLICANT: Kavanaugh, W. Michael
; TITLE OF INVENTION: HUMAN PGP-21 GENE AND GENE EXPRESSION
; TITLE OF INVENTION: PRODUCTS
; FILE REFERENCE: PP-16758.001/201130.408
; CURRENT APPLICATION NUMBER: US/09/715,805
; CURRENT PLING DATE: 2000-11-16
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                       DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                       71.3%; Score 793.5; DB 4
78.9%; Pred. No. 2.9e-69;
tive 10; Mismatches 31
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Best Local Similarity 78.9%
Matches 157; Conservative
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Matches 157; Conservative
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US-09-715-805-2
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Gaps

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1 MDSDETGFEHSGLWVSVLAGLLIGACQAHDIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH 60
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APPLICANT: William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/907,794A
CURRENT APPLICATION NUMBER: PCT/US00/04414
PRIOR APPLICATION NUMBER: DCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
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                                          Score 432; DB 4; Length 85;
Pred. No. 1.2e-34;
0; Mismatches 1; Indels
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PRIOR PILLING DATE: 1999-07-07
PRIOR PLILING DATE: 1999-07-07
PRIOR PLILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR PLILING DATE: 1999-09-08
PRIOR PLILING DATE: 1999-09-08
PRIOR PLILING DATE: 1999-09-13
PRIOR PLILING DATE: 1999-09-15
PRIOR PLILING DATE: 1999-10-05
PRIOR PLILING DATE: 1999-10-05
PRIOR PLILING DATE: 1999-10-05
PRIOR PLILING DATE: 1999-10-05
PRIOR PLILING DATE: 1999-11-29
PRIOR PLILING DATE: 1999-11-29
PRIOR PLILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR APPLICATION NUMBER: PCT/US99/28313
                                                                                                                                                                                                                            61 LEIREDGTVGGAADQSPESLLQLK 84
                                                                                                                                                                                                                                                                     LEIREDGTVGGAADQSPESKLQLK 84
                                                                                                                                                                                                                                                                                                                                                                                    Sequence 59, Application US/09907794A Patent No. 6635468 GENERAL INFORMATION:
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Grimaldi, Christopher J.
                                             38.8%;
98.8%;
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Hillan, Kenneth, J.
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Stewart, Timothy A.
Tumas, Daniel
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Filvaroff, Ellen
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Gerritsen, Mary E.
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Mather, Jennie P.
                                        Query Match
Best Local Similarity 98.8
Matches 83; Conservative
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Gao, Wei-Qiang
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APPLICANT: Ashkenazi, Avi
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US-09-621-976-5213
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 KDSPNQDATSWGPVRFLPMPGLIHEPQDQAGFLPPEPPDVGSSDPLSMVEPLQGRSPSYA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89 GVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAHGLPLHLPG 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     149 NKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMVGPSQGRSPSYA 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29 HPIPDSSPLLQFGGQVRQRYLYTDDAQQTBAHLBIRBDGTVGGAADQSPESLLQLKALKP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Thomason, Arlen
APPLICANT: Liu, Benxian
TITLE OF INVENTOR: Fibroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 99-371
CURRENT APPLICATION NUMBER: US/09/390,207
CURRENT FILING DATE: 199-09-07
NUMBER OF SEQ ID NOS: 41
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 181;
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Pred. No. 2.1e-65;
9; Mismatches 26; Indels
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Fatent No. 6639063
GENERAL INFORMATION
APPLICANT: Unmas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: ESTE and Encoded Human Proteins.
FILE REFERENCE: GENSET, 054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 5213
LENGTH: 85
                                             192 SDPLSMVRPLQGRSPSYAS 210
                  191 SDPLSMVGPSQGRSPSYAS 209
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Patent No. 6504530
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Best Local Similarity 80.7%;
Matches 146; Conservative
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CORGANISM: Mus musculus
US-09-390-207-6
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OTHER INFORMATION: Xaa
NAME/KEY: UNSURE
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ORGANISM: Homo sapiens
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US-09-390-207-6
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LENGTH: 181
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APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
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                                                                                                                                                                                                                                                                                                                                                                                             26;
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PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR FILING DATE: 1999-12-05
PRIOR PILING DATE: 1999-12-16
PRIOR PILING DATE: 1999-12-16
PRIOR FILING DATE: 1999-12-20
PRIOR FILING DATE: 1999-12-20
PRIOR FILING DATE: 1999-12-20
PRIOR PRILING DATE: 1999-12-20
PRIOR PILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 59
"WANTER APPLICATION NUMBER: PCT/US00/00219
SEQ ID NO 59
"WANTER OF SEQ ID NOS: 423
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CURRENT APPLICATION NUMBER: US/09/905,125A
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Patent No. 6664376
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Godowski, Paul J.
Grimaldi, Christopher
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Hillan, Kenneth, J.
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Stewart, Timothy A.
Tumas, Daniel
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Filvaroff, Ellen
Fong, Sherman
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Gerber, Hanspeter
Gerritsen, Mary E.
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Paoni, Nicholas F
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Mather, Jennie P.
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APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
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Eaton, Dan L.
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US-09-907-794A-59
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US-09-905-125A-59
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Best Local &
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APPLICANT:
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68 TVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELL 127
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PRIOR FILING DATE: 1999-09-15
PRIOR PLING DATE: 1999-09-15
PRIOR PLING DATE: 1999-10-05
PRIOR PLING DATE: 1999-11-29
PRIOR PLING DATE: 1999-11-29
PRIOR PELING DATE: 1999-11-29
PRIOR PELING DATE: 1999-11-29
PRIOR PELING DATE: 1999-11-29
PRIOR PELING DATE: 1999-11-20
PRIOR PELING DATE: 1999-11-20
PRIOR PELING DATE: 1999-12-02
PRIOR PELING DATE: 1999-12-02
PRIOR PELING DATE: 1999-12-06
PRIOR PELING DATE: 1999-12-06
PRIOR PELING DATE: 1999-12-06
PRIOR PELING DATE: 1999-12-20
PRIOR PELING DATE: 1990-12-20
PRIOR PELING DATE: 1990-12-20
PRIOR PELING DATE: 1990-12-20
PRIOR PELING DATE: 1990-12-20
PRIOR APPLICATION NUMBER: PCT/USO0/04414
PRIOR FILING DATE: 2000-02-22
PRIOR FILING DATE: 1900-07-07
PRIOR PLING DATE: 1999-07-07
PRIOR PLING DATE: 1999-07-26
PRIOR PLING DATE: 1999-07-26
PRIOR PLING DATE: 1999-07-26
PRIOR PELING DATE: 1999-07-28
PRIOR FILING DATE: 1999-07-28
PRIOR FILING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-08
PRIOR FILING DATE: 1999-09-13
PRIOR PLING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR APPLICATION NUMBER: PCT/US99/21547
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US-09-902-775A-59
Sequence 59, Application US/09902775A
; Patent No. 6686451
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Best Local Similarity 30....

And 77; Conservative 2
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APPLICANT: Genentech, Inc.; APPLICANT: Ashkenazi, Avi; APPLICANT: Bottefin, David; APPLICANT: Besnoyers, Luc; APPLICANT: Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Botstein, David
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US-09-905-125A-59
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63 99

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128 LEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALP----EPPGI--- 180
                                                                                                          127 RPDGYNVYRSEKHRLPVSLSSAKQ-RQLYKNRG---FLPLSHFLPMLPMVPERPEDLRGH 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68 TVGGAADQSPESILOLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELL 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        128 LEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPLPGLPPALP----EPPGI--- 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            127 RPDGYNVYRSEKHRLPVSLSSAKQ-RQLYKNRG---PLPLSHFLPMLPMLPMVPEPEDLRGH 182
TVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELL 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11 SGLWVSVLAGILIGACQAHPIPDSSPLLQF -- GGQVRQRYLYTDDAQ-QTEAHLEIREDG
                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Itch, No. 6716626uyuki
APPLICANT: Kavanaugh, W. Michael
ITILE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
ITILE OF INVENTION: PRODUCTS
ITILE OF INVENTION: PRODUCTS
CURRENT APPLICATION NUMBER: US/09/715,805
CURRENT PILING DATE: 2000-11-16
NUMBER OF SEQ ID NOS: 17
SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23.8%; Score 265; DB 4; Length 216; 36.3%; Pred. No. 6.9e-18; ive 27; Mismatches 82; Indel8
                                                                                                                                                181 ----LAPOPPDVGSSDPLSMV-GPSQGRSPSY 207
                                                                                                                                                                       181 ----LAPQPPDVGSSDPLSMV-GPSQGRSPSY 207
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                                                                                                                                                                                                                                                                          Sequence 10, Application US/09715805 Patent No. 6716626
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Filvaroff, Ellen
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Goddard, A.
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Best Local Similarity 36.33
Matches 77; Conservative
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Botstein, David
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Eaton, Dan L.
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Gao, Wei-Qiang
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ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                         RESULT 11
US-09-715-805-10
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68
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APPLICANT:
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APPLICANT:
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APPLICANT:
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                                                                                                                                                                                                                                                                                                            APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
ITLLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
ITLLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11 SGLWVSVLAGLLLGACQAHPIPDSSPLLQF--GGQVRQRYLYTDDAQ-QTEAHLEIREDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14 AGLWLAV-AGRPLA-----FSDAGPHVHYGWGDPIRLRHLYTSGPHGLSSCFLRIRADG
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; Pred. No. 6.9e-18;
27; Mismatches 82
                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/902,775A CURRENT FILING DATE: 2001-07-10 PRIOR APPLICATION NUMBER: PCT/US00/04414 PRIOR FILING DATE: 2000-02-22
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R APPLICATION NUMBER: PCT/US99/20944

R PILING DATE: 1999-09-13

R APPLICATION NUMBER: PCT/US99/21090

R FILING DATE: 1999-09-15

R APPLICATION NUMBER: PCT/US99/21547

R FILING DATE: 1999-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R APPLICATION NUMBER: US 60/143,048

R FILING DATE: 1999-07-07

R APPLICATION NUMBER: US 60/145,698

R FILING DATE: 1999-07-26

R FILING DATE: 1999-07-28

R FILING DATE: 1999-07-28

R FILING DATE: 1999-07-28
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PILING DATE: 1999-12-02
APPLICATION NUMBER: PCT/US99/28565
FILING DATE: 1999-12-02
APPLICATION NUMBER: PCT/US99/30095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1999-12-20
APPLICATION NUMBER: PCT/USO0/00219
FILING DATE: 2000-01-05
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FILING DATE: 1999-10-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: PCT/US99/28214
FILING DATE: 1999-11-29
APPLICATION NUMBER: PCT/US99/28313
FILING DATE: 1999-11-30
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APPLICATION NUMBER: PCT/US99/30999
                                                                                                        Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                            Roy, Margaret Ann
Stewart, Timothy A.
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                                                      Gerber, Hanspeter
Gerritsen, Mary E
                                                                                                                                                                                                                                       Paoni, Nicholas F
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                                                                                                                                              Gurney, Austin L.
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Mather, Jennie P.
Pan, James
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Best Local Similarity 36.3
Matches 77; Conservative
                 Fong, Sherman
Sao, Wei-Qiang
                                                                                                                                                                                                                                                                                                 Tumas, Daniel
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NUMBER OF SEQ ID NOS: 423
SEQ ID NO 59
LENGTH: 216
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ORGANISM: Homo sapiens
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----LAPOPPDVGSSDPLSMV-GPSOGRSPSY 207
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APPLICANT:
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APPLICANT: Wood, William, P. Wickey
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acide Encoding the Same
CURRENT FILMS DATE: 2000-03-18
PRIOR PELICATION NUMBER: US/09/906,700
CURRENT FILMS DATE: 2000-03-18
PRIOR PELICATION NUMBER: US 60/143,048
PRIOR PELICATION NUMBER: US 60/145,698
PRIOR PELICATION NUMBER: US 60/145,698
PRIOR PELICATION NUMBER: PCT/US99/2034
PRIOR PLILING DATE: 1999-07-08
PRIOR PLILING DATE: 1999-09-18
PRIOR PLILING DATE: 1999-09-18
PRIOR PLILING DATE: 1999-09-18
PRIOR PLILING DATE: 1999-09-15
PRIOR PLILING DATE: 1999-09-15
PRIOR PLILING DATE: 1999-09-15
PRIOR PLILING DATE: 1999-10-12
PRIOR PLILING DATE: 1999-10-12
PRIOR PLILING DATE: 1999-10-13
PRIOR PLILING DATE: 1999-10-13
PRIOR PLILING DATE: 1999-11-20
PRIOR PLILING DATE: 1999-11-20
PRIOR PLILING DATE: 1999-11-20
PRIOR PLILING DATE: 1999-12-02
PRIOR PLILING DATE: 1999-12-03
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Grimaldi, Christopher J.
                                                                                                                                                                                                                      Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
                               Gurney, Austin L.
Hillan, Kenneth, J.
                                                                                                                                                      Pan, James
Paoni, Nicholas F.
                                                                                            Kljavín, Ivar J.
Mather, Jennie P.
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Best Local Similarity 36.3
Matches 77; Conservative
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CRGANISM: Homo sapiens
US-09-906-700-59
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APPLICANT:
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APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: GNR.161892C12
CURRENT APPLICATION NUMBER: US/09/903,603A
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: 05/03/903/903/903/PRIOR PRIOR PAPLICATION NUMBER: 05/04/91/903/903/PRIOR PRIOR PAPLICATION NUMBER: 05/04/91/908/94/94
PRIOR FILING DATE: 1999-07-07
PRIOR PELING DATE: 1999-07-26
PRIOR PELING DATE: 1999-07-28
PRIOR PILING DATE: 1999-07-28
PRIOR PELING DATE: 1999-07-28
PRIOR PELING DATE: 1999-09-13
PRIOR PELING DATE: 1999-09-13
PRIOR PELING DATE: 1999-09-13
PRIOR PELING DATE: 1999-09-13
PRIOR PELING DATE: 1999-09-15
PRIOR PELING DATE: 1999-10-09-15
PRIOR PELING DATE: 1999-10-05
PRIOR PELING DATE: 1999-10-05
PRIOR PELING DATE: 1999-11-29
PRIOR PELING DATE: 1999-12-02
PRIOR PELING DATE: 1999-12-05
PRIOR PELING DATE: 1999-12-05
PRIOR PELING DATE: 1999-12-05
PRIOR PELING DATE: 1999-12-05
PRIOR PELING DATE: 1999-12-06
PRIOR PELING DATE: 1999-12-06
PRIOR PELING DATE: 1999-12-06
PRIOR PELING DATE: 1999-12-07
PRIOR PELING DATE: 1999-12-07
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Patent No. 6767995
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Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth, J.
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Stewart, Timothy A.
Tumas, Daniel
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Filvaroff, Ellen
Fong, Sherman
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Gerritsen, Mary E
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Mather, Jennie P.
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Ashkenazi, Avi
Botstein, David
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PPLICANT: Wood, William, I.
ITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
ITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                 23.8%; Score 265; DB 4; Length 216; 36.3%; Pred. No. 6.9e-18; Live 27; Mismatches 82; Indels
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PRIOR PILING DATE: 2000-02-22
PRIOR PILING DATE: 100-07-07
PRIOR PILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR PILING DATE: 1999-07-26
PRIOR PILING DATE: 1999-07-26
PRIOR PILING DATE: 1999-07-28
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PRIOR APPLICATION NUMBER: PCT/US00/00219
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
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Patent No. 6806352
GENERAL INFORMATION:
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Grimaldi, Christopher J.
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Roy, Margaret Ann
Stewart, Timothy A.
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ilvaroff, Ellen
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Gerritsen, Mary B
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Mather, Jennie P.
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Best Local Similarity 36.3%
Matches 77; Conservative
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APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Baton, Dan L.
APPLICANT: Eaton, Dan L.
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                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
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                                                         SEQ ID NO 59
LENGTH: 216
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GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR PILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.0
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; Pred. No. 6.9e-18;
27; Mismatches 82
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PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR PLING DATE: 1999-09-08
PRIOR PLING DATE: 1999-09-13
PRIOR FILING DATE: 1999-09-13
PRIOR PLING DATE: 1999-09-15
PRIOR PLING DATE: 1999-10-05
PRIOR PLING DATE: 1999-10-05
PRIOR PLING DATE: 1999-11-20
PRIOR PLING DATE: 1999-11-20
PRIOR PLING DATE: 1999-11-30
PRIOR PLING DATE: 1999-11-30
PRIOR PLING DATE: 1999-12-05
PRIOR PLING DATE: 1999-12-05
PRIOR PLING DATE: 1999-12-05
PRIOR PLING DATE: 1999-12-06
PRIOR PLING DATE: 1999-12-07
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Patent No. 6812339
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Best Local Similarity 36.34
Matches 77; Conservative
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US-09-904-920A-59
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US-09-949-016-8206
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Search completed: July 8, 2005, 22:22:32 Job time: 72.5375 secs

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July 8, 2005, 22:18:21; Search time 249.058 Seconds (without alignments) 324.193 Million cell updates/sec
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1 MDSDETGFEHSGLWVSVLAG......SSDFLSMVGFSQGRSFSYAS 209
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| cgn2 6/ptodata/2/pubpaa/US06 NEW PUB.pep:*
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| cgn2 6/ptodata/2/pubpaa/US06 PUBCOMB.pep:*
| cgn2 6/ptodata/2/pubpaa/US07 NEW PUB.pep:*
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| cgn2 6/ptodata/2/pubpaa/US09 NEW PUB.pep:*
| cgn2 6/ptodata/2/pubpaa/US09 PUBCOMB.pep:*
| cgn2 6/ptodata/2/pubpaa/US09 NEW PUB.pep:*
| cgn2 6/ptodata/2/pubpaa/US10 PUBCOMB.pep:*
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cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
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	Description		Sequence 15, Appl	Sequence 15, Appl	Sequence 4, Appli	Sequence 24, Appl	4	4,	62,	66,	Sequence 70, Appl	68,
	ΩI	US-09-822-485-24	US-09-801-968-15	US-09-802-154-15	US-10-060-765-4	US-10-374-207-24	US-10-818-140-4	US-10-771-173-4	US-10-659-004-62	US-10-659-004-66	US-10-659-004-70	US-10-659-004-68
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	Query Match Length DB	209	209	209	209	209	209	209	209	209	209	209
æ	Query Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	9.66	9.66	99.6	99.5
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equence 72, Applications 21, Application	Sequence /8, Appl Sequence 78, Appl
US-10-659- US-10-659- US-10-659- US-10-659- US-10-659- US-10-659- US-10-659- US-10-659- US-10-659- US-10-230- US-10-230- US-10-230- US-10-230- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219- US-10-219-	4 US-10-213-536-78
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# ALIGNMENTS

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Sequence 24, Application US/09822485
Sequence 24, Application US/09822485
Patent No. US20020001825A1
SEQUENCE 24, Application US/0020001825A1
SERERAL INFORMATION:
APPLICANT: Itch, No. US20020001825A1uyuki
TITLE OF INVENTION: No. US20020001825A1e1 Fibroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 08035.0001-01000
CURRENT APPLICATION NUMBER: US/09/822,485
CURRENT FILING DATE: 2001-04-02
NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 24
LENGTH: 209
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Best Local Similarity 100.0%; Pred. No. 1.5e-83;
Matches 209; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens PUBLICATION INFORMATION:
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US-09-822-485-24
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LAPOPPDVGSSDPLSMVGPSQGRSPSYAS 209
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Best Local Similarity
Matches 209; Conserv
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US-10-374-207-24
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US-09-802-154-15
US-09-802-154-15
Fublication No. US20030105302A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Itoh, No. US20030105302A1uyuki
TITLE OF INVENTION: HUMAN FGF-23 GENE AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS.
FILE REPERENCE: PP-17149.001/201130.409
CURRENT APPLICATION NUMBER: US/09/802,154
CURRENT FILING DATE: 2001-03-07
NUMBER OF SEQ ID NOS: 46
SOFTMARE: FastSEQ for Windows Version 4.0
                                                                                                                                                             Sequence 15, Application US/09801968
| Patent No. US20020082205A1
| GRNERAL INFORMATION:
| APPLICANT: Itch, No. US20020082205Aluyuki
| APPLICANT: Itch, No. US20020082205Aluyuki
| TITLE OF INVENTION: HUMAN FGF-23 GENE AND GENE EXPRESSION
| TITLE OF INVENTION: PRODUCTS
| FILE REFERENCE: PP-17150.001/201130.40901
| CURRENT APPLICATION NUMBER: US/09/801,968
| CURRENT FILING DATE: 2001-03-07
| NUMBER OF SEQ ID NOS: 46
| SOFTWARE: FastSEQ for Windows Version 4.0
| SEQ ID NO 15
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                                                   LAPQPPDVGSSDPLSMVGPSQGRSPSYAS 209
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ORGANISM: Homo sapiens
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US-09-801-968-15
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LENGTH: 209
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Sequence 24, Application US/10374207

Publication No. US20030170822A1

GENERAL INFORMATION:

APPLICANT: Itch, No. US20030170822A1uyuki

TITLE OF INVENTION: Fibroblast Growth Factor-Like Molecules and Uses Thereof

TITLE OF INVENTION Fibroblast Growth Factor-Like Molecules and Uses Thereof

CURRENT APPLICATION NUMBER: US/10/374,207

CURRENT FILING DATE: 2003-02-25

PRIOR PELING DATE: 2001-04-02

PRIOR PELING DATE: 2001-04-02

PRIOR APPLICATION NUMBER: US 09/540,118
                                                                                                                      61 LEIREDGTVGGAADQSPESILIQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA 120
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llarity 100.0%; Pred. No. 1.5e-83;
Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4, Application US/10060765
; Sequence 4, Application US/10060765
; Publication No. US20020164713A1
; GENERAL INFORMATION:
; APPLICANT: Itoh, No. US20020164713Aluyuki
; APPLICANT: Kavanaugh, W. Michael
; TITLE OF INVENTION: HUMAN PGF-21 GENE AND GENE EXPRESSION
; TITLE OF INVENTION: HUMAN PGF-21 GENE AND GENE CURENT APPLICATION NUMBER: US/10/060,765
; CURRENT FILING DATE: 2002-01-29
; PRIOR APPLICATION NUMBER: US/09/715,805
; PRIOR PILING DATE: 2002-01-16
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PREESEQ for Windows Version 4.0
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GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Zhong et al.

TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOI FILE REPERENCE: 21402-608

CURRENT APPLICATION NUMBER: US/10/659,004

CURRENT FILING DATE: 2001-06-04

PRIOR PELING DATE: 2001-06-04

PRIOR PELING DATE: 2001-06-04

PRIOR PELING DATE: 2001-06-06

PRIOR PELING DATE: 2001-06-11

PRIOR PELING DATE: 2001-06-12

PRIOR PELING DATE: 2001-06-13

PRIOR PELING DATE: 2001-06-15

PRIOR PELING DATE: 2001-06-15
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                                                                                                                   Sequence 4, Application US/10771173

Publication No. US20050037457A1

GENERAL INFORMATION:

APPLICANT: Itoh, Nobuyuki

TITLE OF INVENTION: HUMAN RGF-21 GENE AND GENE EXPRESSION

TITLE OF INVENTION: PRODUCTS

TITLE OF INVENTION: PRODUCTS

CURRENT APPLICATION NUMBER: US/10/771,173

CURRENT FILING DATE: 2004-02-03

PRIOR PILING DATE: 2000-11-16

NUMBER OF SEQ ID NOS: 17

SOFTWARE PEASTER OF Windows Version 4.0
           181 LAPQPPDVGSSDPLSMVGPSQGRSPSYAS 209
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Publication No. US20050048507A1
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Best Local Similarity 100.
Matches 209; Conservative
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ORGANISM: Homo sapiens
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APPLICANT: ROADUNUKI
APPLICANT: Kavanaugh, W. Michael
APPLICANT: Kavanaugh, W. Michael
APPLICANT: Kavanaugh, W. Michael
TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS
CURRENT PRILIG DATE: 2004-04-05
PRIOR PILING DATE: 2004-04-05
PRIOR PLING DATE: 2004-01-16
NUMBER OF SEQ ID NOS: 17
SOFTWARE: FRASESQ for Windows Version 4.0
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                                                                                                                                                                                       PUBLICATION INFORMATION:

JOURNAL: Biochim. Biophys. Acta
DATE: 2000
1S-10-374-207-24
PRIOR FILING DATE: 2000-03-31
NUMBER OF SEQ ID NOS: 41
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 24
LENGTH: 209
                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
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ORGANISM: Homo sapiens
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US-10-818-140-4
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LENGTH: 209
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APPLICANT: Zhong et al.
TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOD
FILE REFERENCE: 21402-608
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CURRENT FILING DATE: 2003-09-09

FRIOR PELING DATE: 2001-06-04

FRIOR PELING DATE: 2001-06-04

FRIOR PELING DATE: 2001-06-04

FRIOR APPLICATION NUMBER: 60/295,661

FRIOR APPLICATION NUMBER: 60/296,418

FRIOR PILING DATE: 2001-06-06

FRIOR PELING DATE: 2001-06-06

FRIOR PELING DATE: 2001-06-06

FRIOR PELING DATE: 2001-06-11

FRIOR APPLICATION NUMBER: 60/297,414

FRIOR APPLICATION NUMBER: 60/297,567

FRIOR PELING DATE: 2001-06-12

FRIOR PELING DATE: 2001-06-12

FRIOR PELING DATE: 2001-06-12

FRIOR PELING DATE: 2001-06-12

FRIOR PELING DATE: 2001-06-15

FRIOR PELING DATE: 2001-06-15

FRIOR PELING DATE: 2001-06-15

FRIOR APPLICATION NUMBER: 60/299,949

FRIOR PELING DATE: 2001-06-26

FRIOR PELING DATE: 2001-06-36
                                                                                                         1 MDSDETGFEHSGLWVSALAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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Pred. No. 3.8e-83;
0; Mismatches 1;
    Best Local Similarity 99.5%; Pred. No. 3.1e-83; Matches 208; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                    US-10-659-004-70
; Sequence 70, Application US/10659004
; Publication No. US20050048507A1
; GENERAL INFORMATION:
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Best Local Similarity 99.5
Matches 208; Conservative
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SEQ ID NO 70
LENGTH: 209
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PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/300,883
PRIOR FILING DATE: 2001-06-26
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 187
SOFTWARE: CuraSeqList version 0.1
SEQ ID NO 62
LENGTH: 209
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                                                                                                                                                                                                                                                          Length 209;
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Pred. No. 3.1e-83;
1; Mismatches 0;
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Best Local Similarity 99.5%;
Matches 200; Conservative
                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
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INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOL
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| Sequence 74, Application US/10659004
| Publication No. US20050048507A1
| Publication No. US20050048507A1
| Publication No. US20050048507A1
| Publication No. US20050048507A1
| TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOR
| FILE REPRENCE: 21402-608
| CURRENT PILING DATE: 2001-06-04
| PRIOR PILING DATE: 2001-06-06
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                       FILE REPERRENCE: 21402-608

CURRENT APPLICATION NUMBER: US/10/659,004

CURRENT PILING DATE: 2003-09-09

PRIOR PILING DATE: 2001-06-04

PRIOR PLING DATE: 2001-06-04

PRIOR PLING DATE: 2001-06-04

PRIOR PLING DATE: 2001-06-06

PRIOR PLING DATE: 2001-06-11

PRIOR APPLICATION NUMBER: 60/297,414

PRIOR APPLICATION NUMBER: 60/297,567

PRIOR PLING DATE: 2001-06-12

PRIOR PLING DATE: 2001-06-12

PRIOR PLING DATE: 2001-06-14

PRIOR PLING DATE: 2001-06-15

PRIOR PLING DATE: 2001-06-15

PRIOR PLING DATE: 2001-06-15

PRIOR APPLICATION NUMBER: 60/299,949

PRIOR PLING DATE: 2001-06-26

PRIOR APPLICATION NUMBER: 60/300,883

PRIOR PLING DATE: 2001-06-26

PRIOR APPLICATION NUMBER: 60/300,883

PRIOR PLING DATE: 2001-06-26

PRIOR APPLICATION NUMBER: 60/300,883

PRIOR PLING DATE: 2001-06-26

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 187

CONTING NOS: 187
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Pred. No. 4.5e-83;
); Mismatches 1
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Best Local Similarity 99.5%; Pro
Matches 208; Conservative 0;
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; ORGANISM: Homo sapiens
US-10-659-004-72
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Publication No. US20050048507A1

GENERAL INFORMATION:

APPLICANT: Zhong et al.

TITLE OF INVARION: THERABEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOD CURRENT APPLICATION NUMBER: US/10/659,004

CURRENT FILING DATE: 2001-06-09-09

PRIOR FILING DATE: 2001-06-04

PRIOR PLING DATE: 2001-06-04

PRIOR PLING DATE: 2001-06-06

PRIOR APPLICATION NUMBER: 60/295,611

PRIOR PLING DATE: 2001-06-06

PRIOR APPLICATION NUMBER: 60/295,418

PRIOR PLING DATE: 2001-06-06

PRIOR APPLICATION NUMBER: 60/297,414

PRIOR PLING DATE: 2001-06-06

PRIOR APPLICATION NUMBER: 60/297,414

PRIOR PLING DATE: 2001-06-06

PRIOR PLING DATE: 2001-06-14

PRIOR PLING DATE: 2001-06-15

PRIOR APPLICATION NUMBER: 60/299,949

PRIOR PLING DATE: 2001-06-26

PRIOR APPLICATION NUMBER: 60/299,949

PRIOR PLING DATE: 2001-06-26

PRIOR PLING DATE: 2001-06-15

PRIOR PLING DATE: 2001-06-11

PRIOR PLING DATE: 2001-06-26

PRIOR PLING DATE: 2001-06-21
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   121 CSFRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGI 180
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                                                                   181 LAPOPPDVGSSDPLSMVGPSQGRSPSYAS 209
                                                                                                     LAPOPPDVGSSDPLSMVGPSQGRSPSYAS 209
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 187
SOFTWARE: CuraSequist version 0.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CRGANISM: Homo sapiens US-10-659-004-68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Zhong et al
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Sequence 2, Application US/09799776

Patent NO. US20010012628A1

GENERAL INFORMATION:

APPLICANT: Pankaj Agarwal

APPLICANT: Frank Barone

APPLICANT: Aren S. Kabnick

APPLICANT: Michael S. McQuency

TILE OF INVENTION: sbgFRF-19a

FILE REFERENCE: GP-70659-C1

CURRENT APPLICATION NUMBER: US/09/799,776

CURRENT FILING DATE: 2001-03-06

PRIOR FILING DATE: 1999-11-05

NUMBER OF SEQ ID NOS: 2

SOFTWARE: FastSEQ for Windows Version 3.0

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PRIOR FILING DATE: 2001-06-11
PRIOR APPLICATION NUMBER: 60/297,567
PRIOR FILING DATE: 2001-06-12
PRIOR FILING DATE: 2001-06-12
PRIOR PILING DATE: 2001-06-14
PRIOR PILING DATE: 2001-06-14
PRIOR PILING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-21
PRIOR PILING DATE: 2001-06-21
PRIOR PILING DATE: 2001-06-26
Remaining Prior Application data removed - S
NUMBER OF SEQ ID NOS: 187
SEQ ID NO 74
LENGTH: 209
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Best Local Similarity 99.5'
Matches 208; Conservative
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US-10-659-004-74
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US-09-799-776-2
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WESULT 10.659-004-56
1 Sequence 56, Application US/10659004
2 Sequence 56, Application US/10659004
2 BUDICATION NO. USZOO50048507A1
3 PAPLICATION NO. USZOO50048507A1
3 PAPLICATION NO. USZOO50048507A1
5 TILLE REPERENCE: 2140-2-608
5 CURRENT PILING DATE: 2003-09-09
5 PRIOR APPLICATION NUMBER: 06/296, 007
5 PRIOR PILING DATE: 2001-06-04
5 PRIOR PILING DATE: 2001-06-04
5 PRIOR PILING DATE: 2001-06-04
5 PRIOR APPLICATION NUMBER: 60/296, 404
6 PRIOR APPLICATION NUMBER: 60/296, 404
6 PRIOR APPLICATION NUMBER: 60/296, 418
6 PRIOR PILING DATE: 2001-06-04
6 PRIOR PILING DATE: 2001-06-04
6 PRIOR PILING DATE: 2001-06-11
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7 PRIOR APPLICATION NUMBER: 60/297, 567
6 PRIOR PILING DATE: 2001-06-12
6 PRIOR PILING DATE: 2001-06-14
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Pred. No. 5.5e-83;
0; Mismatches 1;
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Matches 208; Conservative (
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US-10-659-004-56
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July 8, 2005, 22:03:50 ; Search time 51.3792 Seconds (without alignments) 391.390 Million cell updates/sec
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		MDSDETGFEHSGLWVSVLAGSSDPLSMVGPSQGRSPSYAS 209	
US-10-060-765-4	1113	1 MDSDETGFEHSGLWVSVLAG.	
Title:	Perfect score: 1113	Sequence:	

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

283416 Total number of hits satisfying chosen parameters: 283416 seqs, 96216763 residues Searched:

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seq length: 0 Maximum DB seq length: 200000000

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# STIMMARTES

		de			SUMMARIES	
	Score	Query Match	Length	08	ID	Description
1	249.5	22.4	251	. 2	JC7513	fibroblast growth
7	179	16.1	245	Н	TVMST2	transforming prote
e	177.5	15.9	239	Н	S04742	fibroblast growth
4	176.5	15.9	208	~	S20102	fibroblast growth
S	174	15.6	187	~	S23595	embryonic fibrobla
9	173	15.5	206	~	JC4268 .	
7	170.5	15.3	208	7	S14192	fibroblast growth
80	167	15.0	266	~	S68144	fibroblast growth
6	165	14.8	194	~	150710	fibroblast growth
10	164	14.7	264	7	A36207	fibroblast growth
11	163.5	14.7	192	~	S54407	44
12	163.5	14.7	206	-	TVHUHS	fibroblast growth
13	161	14.5	211	~	JC7353	fibroblast growth
14	160.5	14.4	256	~	JC4627	
15	160	14.4	212	N	JC7511	
16	157	14.1	208	N	S66486	
17	157	14.1	208	~	A48137	last
18	155.5	14.0	155	Н	A60721	fibr
19	154.5	•	155	7	D37360	
20	154.5	•	155	~	S04147	н
21	153.5	•	202	Н	TVMSHS	fibroblast growth
22	153	•	208	~	JC7082	
23	150.5	13.5	207	~	JC5941	
24	148.5	•	267	-	TVHUPS	fibroblast growth
25	146.5	13.2	155	Н	A33665	
56	146.5	13.2	207	7	JC5940	fibroblast growth
27	146	13.1	237	Н	S39582	
28	144.5	13.0	155	н	GKBOA	acidic fibroblast
59	143.5	12.9	152	7	JH0476	acidic fibroblast

transforming protein (int-2) - mouse C;Species: Mus musculus (house mouse) C;Date: 31-Dec-1989 #sequence_revision 31-Dec-1989 #text_change 09-Jul-2004 C;Accession: A23930; S08157 R;Moore, R.; Casey, G.; Brookes, S.; Dixon, M.; Peters, G.; Dickson, C. BxMo J. 5, 919-924, 1986 A;Title: Sequence, topography and protein coding potential of mouse int-2: a putative or A;Reference number: A23930; MUID:86247582; PMID:3013624

fibroblast growth	fibroblast growth	keratinocyte growt	keratinocyte growt	fibroblast growth	basic fibroblast g	basic fibroblast g	acidic fiblobrast	acidic fibroblast	basic fibroblast g	protein let-756 [i	basic fibroblast g	basic fibroblast g	fibroblast growth	fibroblast growth	basic fibroblast g
S26049	150588	S49501	148610	A36301	A48834	A40117	JW0055	A60130	831622	H88481	C37360	A31674	JG0184	146711	800185
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194	220	194	194	194	189	155	155	155	164	413	154	154	168	137	146
				12.5 194											
12.8	12.8	12.7	12.6		12.4		11.8	11.5	11.4	11.1		11.0	11.0	10.9	10.9

## ALIGNMENTS

JC7513	
fibrohl	fibrohlast growth factor-23 - monae
C;Speci	C.Species: Musmusculus (house mouse)
C,Date:	C;Date: 30-Jun-2001 #sequence_revision 30-Jun-2001 #text_change 09-Jul-2004
R; Yamas	Bion: UC/Si3 hita, T.; Yoshioka, M.; Itoh, N.
Biochem	Biochem. Biophyg. Res. Commun. 277, 494-498, 2000
A;Title A:Refer	A;Title: Identification of a novel fibroblast growth factor, FGF-23, preferentially exp A:Reference number: JC7513: MUID:20490027: PMID:11032749
A; Conte	A; Contents: Embryo
A; Acces	A;Accession: JC7513 A:Molecule type: mRNA
A, Resid	A;Residues: 1-251 <yam></yam>
A;Cross C;Comme	A;Cross-references: UNIPROT:Q9EPC2; DDBJ:AB037889 C:Comment: This factor, a secreted protein, acts on proximal cells and plays roles in t ^r
C, Genetics:	ics:
Ajcene: igi-23 C;Keywords: nu	Ajene: rgr-zs C;Keywords: nucleus
Query	Query Match 22.4%; Score 249.5; DB 2; Length 251;
Matches	vative 27
ò	12 GLWVSVLAGLLIGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIRBD 66
qq	3 GTCLRLLVGVLCTVCSLGTARAYPDTSPLLGSNWGSLTHLYTATA-RTSYHLQIHRD 58
ò	67 GTVGGAADQSPESLLQLKALKPGVIQILGVKTSRPLCQRPDGALYGSLHFDPEACSFREL 126
qq	59 GHVDGTPHQTIYSALMITSEDAGSVVITGAMTRRFLCMDLHGNIFGSLHFSPENCKFRQW 118
ò	127 LLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEP 177
QQ	:  :    :
ò	178 ·PGILAPOPPDVGSSDPLSMVGPSQGRSP 205
qq	:::   :::  177 HTRSAEDPPERDPLNVLKPRATP 201

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A; Molecule type: DNA
A; Residues: 1-208 <COUD.
A; Cross-references: UNIPROT: P10767; EMBL:X57075
A; Note: it is uncertain whether Met-1, Met-11 or Met-34 is the initiator
R; Iida, S; Yoshida, T.; Naito, K.; Sakamoto, H.; Katoh, O.; Hirohashi, S.; Sato, T.; Ono Orogene; 7, 303-309, 1992
A; Title: Human hst-2 (FGF-6) oncogene: CDNA cloning and characterization.
A; Reference number: S23739; MUID:92195660; PMID:1549352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: mRNA
A; Residues: 1-208 <IID>
A; CROSS-references: In EmBL; X63454
A; Note: it is uncertain whether Met-1 or Met-11 is the initiator
R; Marics, I:; Adelaide, J:; Raybaud, F:; Mattei, M.G.; Coulier, F:; Planche, J.; de Lape
Noncogene 4, 335-340, 1989
A; Title: Characterization of the HST-related FGF.6 gene, a new member of the fibroblast
A; Reference number: S04204; MUID:89201880; PMID:2649847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         embryonic fibroblast growth factor - African clawed frog
Cispecies: Xenopus laevis (African clawed frog)
Cispecies: 19-Peb-1994 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
CiAccesion: 823595
Risaacs, H.V.; Tannahill, D.; Slack, J.M.W.
Development 114, 711-720, 1992
A;Title: Expression of a novel FGF in the Xenopus embryo. A new candidate inducing facto
                                                                                                                                                                                                                     fibroblast growth factor 6 precursor - human NiAlternate names: fibroblast growth factor-related protein FGF.6; transforming protein Cispecies: Homo sapiens (man) C;Date: 18-Feb-1994 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004 C;Accession: S20102; S23739; S04204; S36910 R;Coulier, F.; Batoz, M.; Marics, I.; de Lapeyriere, O.; Birnbaum, D. A;Title: Putative structure of the FGF6 gene product and role of the signal peptide. A;Reference number: S20102; MUID:91360279; PMID:1886714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        44
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Molecule type: DNA
A;Residues: 81-99,'G',101-208 <MAR>
A;Cross-references: EMBL:X14071; NID:g31354; PIDN:CAB37648.2; PID:g4467836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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C;Superfamily: fibroblast growth factor
E:1.40,Domain: (or 11-40 or 34-40) signal sequence #status predicted
F;1-10,Domain: (or 11-40 or 34-40) signal sequence #status predicted
F;41-208/Product: fibroblast growth factor 6 #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13 LWUSVLAGILIGACQAHP-----IPDS---SPLLQ-----FGGQV----
       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               103 CORPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAH 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | || : | | || : || || 140 AMNSKGRLYATPSFQ-EECKFRETLLPNNYNAYESDLY 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 15.9%; Score 176.5; DB 2; Best Local Similarity 29.1%; Pred. No. 5.7e-07; Matches 46; Conservative 27; Mismatches 52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Status: not compared with conceptual translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Gene: GDB:FGF6; hst-2
A;Cross-references: GDB:119908; OMIM:134921
A;Map position: 12p13-12p13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Accession: S04204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
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NyAlternate names: transforming protein int-2
C;Species: Home sapiens (man)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Species: Home sapiens (man)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Species: Home sapiens (man)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Scate: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
R;Brookes, S:; Smith, R.; Casey, G.; Dickson, C.; Peters, G.
Oncogene 4, 429-436, 1989
A;Rile: Sequence organization of the human int-2 gene and its expression in teratocarcinal paracerance number: 804742; MUID:89239468; PMID:2470007
A;Residues: 1.239 <a href="https://documer.nial/">A;Residues: 110-339 <a href="https://documer.nial/">A;Residues: 110-339 <a href="https://documer.nial/">https://documer.nial/"
A; Residues: 1-245 <moo.
A; Residues: 1-245 <moo.
A; Residues: 1-245 <moo.
A; Residues: 1-245 <moo.
A; Crosa references: UNIPROT: P05524; GB: Y00848; GB: M26284; GB: X68450; NID: G52716; PIDN: CP R; Acland, P.; Dixon, M.; Peters, G.; Dickson, C.
Nature 343, 662-665, 1990
A; Title: Subcellular fate of the Int-2 oncoprotein is determined by choice of initiation A; Reference number: S08157; MUD: 90158795; PMID: 2406607
A; Reference number: S08157
A; Status: not compared with conceptual translation
A; Mocession: S08157
A; Residues: 'HSRAGLARGRVLPAPRIRETRAGAAAAGGRDAGM', 3-17 <ACL>
C; Genetics:
A; Genetics:
C; Genetics:
A; Map position: 7
A; Introns: 74/1; 108/3
C; Superfamily: fibroblast growth factor
C; Keywords: growth factor; transforming protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101 FLCORPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAP-- 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40 GGAPRRRKIYC----ATKYHLQLHPSGRVNGSLENSAYSILEITAVEVGVVAIKGLFSGR 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41 GGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 245;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    78; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16.1%; Score 179; DB 1; ilarity 28.8%; Pred. No. 4.3e-07; Conservative 30; Mismatches 78
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Best Local S:
Matches 51
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Best Local S:
Matches 51
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A,Cross-references: UNIPROT:P48807; EMBL:D64085; NID:g992952; PIDN:BAA10966.1; PID:g9929
C,Superfamily: fibroblast growth factor
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C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 06-Dec-1996 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
C;Accession: S68144
R;Hattori, Y.; Yamasaki, M.; Itoh, N.
Biochim. Biophys. Acta 1306, 31-33, 1996
A;Title: The rat FGF-5 mRNA variant generated by alternative splicing encodes a novel A;Reference number: S68144; MUID:96201703; PMID:8611621
A;Accession: S68144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     85 ALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAH---- 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141 -GLPLHLPGNKSPHRDPAPRG------PARFLP-----LPGLP-----PALPEPP 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182 TGREWYVALNK---RGKAKRGCSPRVKPQHVSTHFLPRFKQSEQPELSFTVTVPEKKKPP 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     34 SSPLLQFGGQVRQRYLYTDDAQQTEA-----HLEIREDGTVGGAADQSPESLLQLK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42 GOVRORYLYTDDAQOTEAHLBIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                   A; Molecule type: DNA
A; Residues: 1-208 < LAR>
A; Residues: 1-208 < LAR>
A; Residues: 1-208 < LAR>
A; Cross-references: UNIPROT: P21658; EMBL: X51552
A; Cross-references: UNIPROT: P21658; EMBL: X51552
A; Note: it is uncertain whether Met-1 or Met-11 is the initiator
B; Ollendorff; V.; Rosnet, O.; Marics, I.; Birnbaum, D.; deLapeyriere, O. Biochimie 74, 1035-1038, 1992
A; Title: Isolation and sequence of the murine Fgf6 cDNA.
A; Reference number: 149664; MUID: 93120244; PMID: 1477139
A; Recession: I49665
A; Recession: I49665
A; Readlues: 19-208 < RES>
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: MRSA
A; Molecule type: MRSA
A; Cross-references: GB: M92416; NID: 9193288; FIDN: AAA62261.1; PID: 9666915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A,Molecule type: DNA
A,Residues: 1-18 <RE2>
A,Cross-references: GB:M92415; NID:g193286; PIDN:AAA62260.1; PID:g193287
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                102 LCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAH 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Reference number: S14192; MUID:90295275; PMID:2193291
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A;Residues: 1-266 <HAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 15.3%; Score 170.5; DB 2; Best Local Similarity 36.4%; Pred. No. 1.7e-06; Matches 36; Conservative 21; Mismatches 39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Status: preliminary; translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A, Introns: 116/1; 150/3
C, Superfamily: fibroblast growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63; Conservative
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C;Species: Bos primigenius taurus (cattle)
C;Species: Bos primigenius taurus (cattle)
C;Species: Bos primigenius taurus (cattle)
C;Stecession: JG4268
R;Yu, J.C.; DeSeabra, A.J.J.; Wang, L.M.; Fleming, T.P.; Chedid, M.; Miki, T.; Heidaran, Gene 162, 33-34, 1995
A;Tille: An unexpected transforming gene in calf-thywms carrier DNA: Bovine hst.
A;Reference number: JC4268; MUID:96032369; PMID:7557455
A;Ritle: An unexpected transforming gene in calf-thywms carrier DNA: Bovine hst.
A;Residues: 1-206 «YUJ>
A;Residues: 1-206 «YUJ>
A;Residues: 1-206 «YUJ>
A;Ross-references: GB:UIS569
A;Note: The authors translated the codon GGC for residue 114 as Ser
C;Comment: This protein is a member of fibroblast growth factor family. The hstgene in C;Gene: hst
A;Introns: 113/3; 145/2
C;Superfamily: fibroblast growth factor
C;Keywords: thymus; transforming protein
                                                                                   A;Molecule type: mRNA
A;Residues: 1-187 <1SA>
A;Cross-references: UNIPROT:P48805; EMBL:X62593; NID:g64692; PIDN:CAA44479.1; PID:g64693
C;Superfamily: fibroblast growth factor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93 ILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAH-GLPLHLPGN-- 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        109 LYGVKSGMFVAMNAKGKLYGSRXFN-EECKFKETLLPNNYNAYESRKYPGMYTALGKNGR 167
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           104 IGGVHADTSDGLLELSPVERGVVSIFGVASRFFVAMSSRGRLYGSPFFTDE-CRFREILL 162
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                                                                                                                                                                                                                                                                                                                                                                                                                                     33 DSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESLLQLKALKPGVIQ
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                                                                                                                                                                                                                                                                                      Length 187;
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                                                                                                                                                                                                                                                                                                                                                             57; Indels
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Reference number: S23595; MUID:92315916; PMID:1618138
Accession: S23595
                                                                                                                                                                                                                                                                                  15.6%; Score 174; DB 2; 34.8%; Pred. No. 7.9e-07;
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                                                                                                                                                                                                                                                                                                                                                             23; Mismatches
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fibroblast growth factor 4 - bovine
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A,Molecule type: mRNA
A,Residues: 1-192 <ISA>
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fibroblast growth factor 5 - mouse

C;Species: Mus musculus (house mouse)

C;Date: 28-Mar-1991 #sequence_revision 28-Mar-1991 #text_change 09-Jul-2004

C;Date: 28-Mar-1991 #sequence_revision 28-Mar-1991 #text_change 09-Jul-2004

C;Date: 28-Mar-1991 #sequence_revision 28-Mar-1991 #text_change 09-Jul-2004

C;Accession: A36207; B37360

A;Title: Expression of the murine fibroblast growth factor 5 gene in the adult central now a;Reference number: A36207; MUID:91045929; PMID:1700424

A;Reference number: A36207; MUID:91045929; PMID:1700424

A;Retaus: prediminary; not compared with conceptual translation

A;Retaus: prediminary; not compared with conceptual translation

A;Retaus: prediminary

A;Reterence: UNIPROT:P15656; GB:M37821; GB:M37822; GB:M37823; NID:g193280; PIDN:A

A;Cross-references: UNIPROT:P15656; GB:M37821; GB:M37822; GB:M37823; NID:g193280; PIDN:A

A;Cross-references: UNIPROT:P15656; GB:M37821; GB:M37823; MID:g193280; PIDN:A

A;Title: Isolation of CDNAs encoding four mouse FGF family members and characterization

A;Reference number: A37360; MUID:90201563; PMID:2318343
                                                                                                                                                                                                     fibroblast growth factor 4 - chicken
C;Species: Gallus gallus (chicken)
C;Species: Gallus gallus (chicken)
C;Species: Gallus gallus (chicken)
C;Date: 13-56p-1996 #sequence_revision 13-Sep-1996 #text_change 09-Jul-2004
C;Accession: S78506; S50858; I50710
R;Niswander, L.
R;Niswander, L.
A;Reference number: S78506
A;Accession: U.; Jeffrey, S.; Martin, G.R.; Tickle, C.
Nature 371, 609-612, 1994
A;Title: A positive feedback loop coordinates growth and patterning in the vertebrate li
A;Reference number: 150710; MUID:95021713; PMID:7935794
A;Title: A positive feedback loop coordinates growth and patterning in the vertebrate li
A;Reference number: 150710; MUID:95021713; PMID:7935794
A;Title: A positive feedback loop coordinates growth and patterning in the vertebrate li
A;Reference number: 150710; MUID:95021713; PMID:7935794
A;Title: A positive feedback loop coordinates growth factor
C;Genetics: REME:014654; NID:9609347; PIDN:AAAS8706.1; PID:9609348
A;Gene: RGF4
A;Gene: RGF4
A;Gene: RGF4
C;Superfemily: fibroblast growth factor
C;Keywords: growth factor; transforming protein
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Best Local Similarity 27.3%; Pred. No. 4.3e-06; Matches 53; Conservative 29; Mismatches 68
---RPWKPKV----PLS---PSR-RSPS 255
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embryonic fibroblast growth factor II - African clawed frog
C;Species: Xenopus laevis (African clawed frog)
C;Species: Xenopus laevis (African clawed frog)
C;Date: 06-Sep-1996 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
C;Accession: S54407
R;Isaacs, H.V.; Tannahill, D.; Slack, J.M.W.
A;Title: Expression of a novel FGF in the Xenopus embryo. A new candidate inducing facto A;Reference number: S23595; MUID:92315916; PMID:1618138
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C; Superfamily: fibroblast growth factor
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ILIDODIASE Growth factor 4 - human

NiAlternate names: heparin secretory transforming protein 1; Kaposi sarcoma oncogene; tr

CiSpecies: Homo sapiens (man)

CiSpecies: Homo sapiens (man)

CiDate: 31-Mar-1989 #sequence revision 31-Mar-1989 #text_change 09-Jul-2004

CiDate: 31-Mar-1989 #sequence revision 31-Mar-1989 #text_change 09-Jul-2004

Rivoshida, T.; Miyagawa, K.; Odagiri, H.; Sakamoto, H.; Little, P.F.R.; Terada, M.; Sugi Proc. Natl. Acad. Sci. U.S.A. 84, 7305-7309, 1987

A;Title: Genomic sequence of het, a transforming gene encoding a protein homologous to f A;Reference number: A28417; MUID:88041096; PMID:2959959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: DNA
A;Residues: 1-206 <YOS>
A;Cross-references: UNIPPOT:P08620; DDBJ:J02986; NID:g184430; PIDN:AAB59555.1; PID:g3867
A;Cross-references: UNIPPOT:P08620; DBJ:J02986; NID:g184430; M:DN:AAB59555.1; PID:g3867
R;Taira, M:; Yoshida, T.; Miyagawa, K.; Sakamoto, H.; Terada, M.; Sugimura, T.
Proc. Natl. Acad. Sci. U.S.A. 84, 2980-2984, 1987
A;Title: CDNA sequence of human transforming gene hst and identification of the coding s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ä
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                                                                                                                                                                                                                                                                                                                               34 SSPLLQFGGQVRQRYLYTDDAQQTEA-----HLEIREDGTVGGAADQSPESLLQLK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         85 ALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAH----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          182 TGREWYVALNK---RGKAKRGCSPRVKPOHVSTHFLPRFKOSEOPELSFTVTVPEKKKPP
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A;Residues: 1-264 <HEB>
A;Cross-references: GB:M30643; NID:g193294; PIDN:AAA96698.1; PID:g309238
C;Superfamily: fibroblast growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120 ACSFRELLLEDGYNVYQSEAH-GLPLHLPGN---KSPHRDPAPRGPARFLP 166
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                                                                                                                                                                                                                                                    42;
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                                                                                                                                                                 Length 264;
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14.7%; Score 163.5; DB 2;
Best Local Similarity 32.4%; Pred. No. 5.5e-06;
Matches 36; Conservative 26; Mismatches 44;
                                                                                                                                                                 14.7%; Score 164; DB 2;
28.6%; Pred. No. 7.3e-06;
tive 25; Mismatches 78
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A; Cross-references: UNIPROT: P48802; EMBL: Z48714; NID: 9971333; PIDN: CAA88596.1; PID: 99713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Note: The authors translated the codon TGG for residue 178 as His C;Comment: This factor belongs to the fibroblast growth factor family which have the fun otein is a cell signalling molecule and plays the roles during the early stages of devel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Accession: JC7511

S;Ohmachi, S.; Watanabe, Y.; Mikami, T.; Kusu, N.; Ibi, T.; Akaike, A.; Itoh, N.
Biochem.. Biophys. Res. Commun. 277, 355-360, 2000
A;Title: FGF-20, a novel neurotrophic factor, preferentially expressed in the substantia A;Reference number: JC7511; MUID:20490008; PMID:11032730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cross-references: UNIPROT:Q9EST9; DDBJ:AB020021
:Comment: This factor is secreted, and plays an important role as a neurotrophic factor
                                                                                                                                                                                                                                                                                                and genomic organ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100 RFLCQRPDGALYGSLHFDPRACSFRELLLEDGYNVYQSRAHGLPLHLPGNKSPHRDPAPR 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        - 154
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91 IQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAH-----GLPLH 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41 GGOVRORYLYTDDAQQTEAHLEIREDGTVGGAADQ-SPESLLQLKALKPGVIQILGVKTS 99
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                                                                 fibroblast growth factor 3 - zebra fish
C;Species: Brachydanio rerio (zebra fish)
C;Species: Brachydanio rerio (zebra fish)
C;Accession: 10-May-1996 #sequence_revision 19-Jul-1996 #text_change 09-Jul-2004
C;Accession: JG4627
R;Kiefer, P.; Straehle, U.; Dickson, C.
Gene 168, 211-215, 1996
A;Title: The zebrafish Fgf-3 gene: CDNA sequence, transcript structure and characterice number: JC4627; MUID:96194899; PMID:8654946
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C;Species: Rattus norvegicus (Norway rat)
C;Date: 30-Jun-2001 #sequence_revision 30-Jun-2001 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             32 PDSSPILLOPGGOVRORYLYTDDAQOTEAHLEIREDGTVGGA-ADOSPESLLQLKALKPGV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 256;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----TTQPPPTGSG----IGGSKRASS 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 212;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160 GPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMVGPSQGRSPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        114 RYLAMNEKGRLYASEVFNRE-CEFLERIHELGYNTYASRHHA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14.4%; Score 160.5; DB 2; 28.1%; Pred. No. 1.3e-05; iive 22; Mismatches 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A,Gene: fgf-20
C,Keywords: brain; growth factor; neurotrophic factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ch 14%; Score 160; DB 2; Similarity 33.8%; Pred. No. 1.2e-05; 54; Conservative 17; Mismatches 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A,Gene: Fgf-3
A,Introns: 93/2; 127/3
A,Superfamily: fibroblast growth factor
C;Keywords: embryo; fibroblast; growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 28.19
Matches 47; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Experimental source: embryo
                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: mRNA
A; Residues: 1-256 <KIE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: DNA
A; Residues: 1-212 <OHM>
                                                                                                                                                                                                                                                                                                                                                                             A; Accession: JC4627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Accession: JC7511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Contents: Brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Genetics:
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Matches
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fibroblast growth factor-20 - human

c; Specials: How sapiens (man)

c; Specials: How sapiens (man)

c; Specials: How sapiens (man)

c; Accession: JC7353

R; Kiritkoshi, H.; Sagara, N.; Saitoh, T.; Tanaka, K.; Sekihara, H.; Shiokawa, K.; Katoh, Biochem. Biochem. Biophys. Res. Commun. 274, 337-343, 2000

A; Title: Molecular cloning and characterization of human FGF-20 on chromosome 8p21.3-p22

A; Recession: JC7353

A; Molecule type: mRNA

A; Recession: JC7353

A; Molecule type: mRNA

A; Recession: JC7353

A; Molecule type: mRNA

A; References: UNIPRO: Q9NP95; DDBJ: AB044277

C; Comment: This factor is involved in physiological and pathological processes, playing

c; Generics:
A; Gene: fgf-20

A; Map position: 8p21.3-8p22

C; Superfamily: fibroblast growth factor

C; Keywords: anglogenesis; carcinogenesis
                       A; Molecule type: mRNA
A; Delli Bovi, P.; Curatola, A.M.; Kern, F.G.; Greco, A.; Ittmann, M.; Basilico, C.
Cell S0, 729-737, 1987
A; Title: An oncogene isolated by transfection of Kaposi's sarcoma DNA encodes a growth f
A; Reference number: A29649; MUID:87301716; PMID:2957062
A; Residues: 1-206 <BOV>
A; Residues: 1-206 <BOV>
A; Residues: 1-206 <BOV>
A; Residues: 1-206 <BOV>
A; Conserveferences: GB:M17446; NID:G186785; PIDN:AAA59473.1; PID:G307092
C; Comment: This protein is an oncogene for Kaposi's sarcoma. It is homologous to the mou
C; Genetics:
A; Genetics:
A; Genetics:
A; Genetics:
A; Genetics: A; Genetics:
A; Genetics:
A; Conserveferences: GB:M17446; NID:G186785; A; Conserveferences: GB:M13.3-11q13.3-11q13.3-11q13.3-11q13.3-11q13.3-11q13.3-11q13.3-11q13.3-11q13.3-11q13.3-11q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.3-1q13.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60 HLBIREDGTVGGAADQSPESILQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPE 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91 IQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAH-----GLPLH 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                108 VSIRGVDSGLYLGMNDKGELYGSEKLTSE-CIFREQFEENWYNTYSSNIYKHGDTGRRYF 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   32 PDSSPLLQFGGQVRQRYLYTDDAQQTBAHLBIREDGTVGGA-ADQSPBSLLQLKALKPGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120 ACSFRELLLEDGYNVYQSEAH-GLPLHLPGN----KSPHRDPAPRGPARFLP 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             th 14.5%; Score 161; DB 2; Length 211; Similarity 33.1%; Pred. No. 9.8e-06; 53; Conservative 19; Mismatches 64; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LPGNKSPHRDPAPRGPAR------PLPLPGLPPALPE 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         167 VALNK----DGTPRDGARSKRHQKFTHFLPRPVDPERVPE 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .5; DB 1; } 6e-06; ches 46;
Reference number: A29876; MUID:87204251; PMID:2953031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ch 14.7%; Score 163.5; E
1 Similarity 36.9%; Pred. No. 6e-06
41; Conservative 19; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best_Local Similarity
Matches 53; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95
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LPGNKSPHRDPAPRGPARFLPLPGLPPALPE 176	. VALNKDGTPRDGARSKRHQKFTHFLPRPVDFERVPE 202
146	167
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Search completed: July 8, 2005, 22:21:03 Job time: 52:3792 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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OM protein - protein search, using sw model

July 8, 2005, 21:54:48; Search time 251.671 Seconds (without alignments) 425.256 Million cell updates/sec Run on:

US-10-060-765-4 1113 1 MDSDETGFEHSGLWVSVLAG......SSDPLSMVGPSQGRSPSYAS 209 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

1612378 Total number of hits satisfying chosen parameters:

1612378 seqs, 512079187 residues

Searched:

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seq length: 0 Maximum DB seq length: 200000000

Database :

UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Description	Q9nsal homo sapien	Q8n683 homo sapien	Q8vi80 rattus norv	Q9jjn1 mus musculu	095750 homo sapien	Q9epc2 mus musculu	Q8vi82 rattus norv		Q9ddn0 gallus gall	O35622 mus musculu	Q8vi81 rattus norv	P05524 mus musculu	P11487 homo sapien	P48803 bos taurus	Q8axal brachydanio	P10767 homo sapien	P48805 xenopus lae	Q8r515 rattus norv	Q9ygd8 oncorhynchu	Q8r519 rattus norv	Q8c399 mus musculu	_	Q9yh31 notophthalm		Q90xq5 ambystoma m		P48804 gallus gall	_	P15656 mus musculu	xeno	P08620 homo sapien
QI.	FGFL HUMAN	Q8N6 <u>8</u> 3	Q8VI80	PGFL_MOUSE	PGPJ HUMAN	FGFN_MOUSE	FGFN RAT	PGFN HUMAN	0 <u>N</u> 0060	PGPP MOUSE	Q8V181	FGF3 MOUSE	FGF3_HUMAN	FGF4_BOVIN	Q8AXA1	PGF6_HUMAN	FGFA_XENLA	Q8R5L5	Q9YGD8	Q8R5L9	080399	FGF6_MOUSE	Q9YH31	O9ESL9	090XQ5	FGF5 RAT	FGF4_CHICK	Q8C7 <u>⊼</u> 8	FGF5_MOUSE	FGFB XENLA	FGF4_HUMAN
DB	-	~	N	-	-	-	ч	ч	~	-	~	-	-	-	~	-	H	~	~	7	~	-	~	~	~	Н	-	~	н	Н	-
% Query Match Length	209	209	208	210	216	251	251	251	227	218	218	274	239	206	205	208	187	208	206	245	195	208	196	212	124	266	194	211	264	192	206
% Query Match	100.0	99.4	72.2	71.3	23.8	22.4	21.2	20.0	19.5	18.6	18.6	16.1	15.9	15.9	15.9	15.9	15.6	15.4	15.4	15.4	15.3	15.3	15.1	15.1	15.0	15.0	14.8	14.8	14.7	14.7	14.7
Score	1113	1106	803.5	793.5	265	249.5	235.5	222.5	216.5	206.5	206.5	179	177.5	177	176.5	176.5	174	171.5	171	171	170.5	170.5	168	168	167.5	167	165	165	164	163.5	163.5
Result No.	7	8	e	4	S	9	7	80	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	78	29	30	31

Q76b59 gallus gall Q6pbt8 brachydanio Q9np95 homo sapien Q8r517 rattus norv P48802 brachydanio Q90xq1 ambystcoma m Q9est9 rattus norv Q9dfc9 brachydanio Q915 homo sapien Q7zzn4 gallus gall Q8r590 homo sapien P31371 homo sapien P31371 homo sapien
Q76B59 FGF1_BRARE FGF2_BRAT FGF3_BRARE G905Q1 Q905Q1 Q9EST9 Q9DFC9 Q9DFC9 Q9DFC9 Q91ZN4 Q7ZN4 Q7ZN4 GRNPO GRNPO FGP9_HUMAN FGP9_HUMAN
<b>0111100000000</b>
87 22 24 24 24 24 24 26 26 26 26 26 26 26 26 26 26 26 26 26
444444444444444 6677444444444444
162.5 162.5 161 161 160.5 160.5 160 159.5 159 159.5 157.5 157.5
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## ALIGNMENTS

NDARD; PRT; 209 AA. 40, Created) 40, Last sequence update) 46, Last annotation update) factor-21 precursor (FGF-21) (UNQ3115/PRO10196).	Homo sapiens (Human).  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.  MOBI TaxID=9606;  SEQUENCE FROM N.A.  MEDLINE=20461777; PubMed=10858849; DOI=10.1016/80167-4781(00)00067-1;  Nishimura T., Nakatake Y., Konishi M., Itoh N.; Itoh N.;  "Identification of a novel FGF, FGF-21, preferentially expressed in	Biochim. Biophys. Acta 1492:203-206(2000).  [2]  SEQUENCE FROM N.A.  SEQUENCE FROM N.A.  Clark H.P., Gurney A.L., Abaya B., Baker K., Baldwin D., Brush J.,  Chen J., Chow B., Chuit C., Crowley C., Currell B., Douel B., Dowd P.,  Chen J., Chow B., Chini C., Crowley C., Currell B., Detel B., Dowd P.,  Eaton D., Foster J., Grimaldi C., Gu C., Hass P.E., Heldens S.,  Lewis L., Liao D., Mark M., Robbie E., Sancher C., Schoenfeeld J.,  Vandlen R., Watanabe C., Wieand D., Woods K., Xie MH., Yansura D.,  Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I.,	"The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment."; bioinformatics assessment."; denome Res. 13:2265-2270(2003). [3] SEQUENCE OF 29-43. PubMed=15340161; DOI=10.1110/ps.04682504; PubMed=15340161; DOI=10.1110/ps.04682504; "Signal peptide prediction based on analysis of experimentally varified cleavage sites."; "Signal peptide prediction based (Potential). Protein Sci. 13:2819-2824(2004)i. SUBCELULAR LOCATION: Secreted (Potential)i. SIMILARITY: Belongs to the heparin-binding growth factors family.	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation—the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
STANDARD; (Rel. 40, Cr. (Rel. 40, La. (Rel. 46, Larrowth factor	(Human). tazoa; Chori neria; Prim 56; N.A. 777; PubMed: Nakatake Y	N.A. N.A. 296; PubMed Irney A.L., B., Chui C er J. H.S., Klimm D., Mark P Simmons L. Atanabe C., Atana	protein di tiffy novel 3 assessment 3:225-2270 3-43. 1, DoI=10 1, D	OT entry is Swiss Instit Swiss Instit Swiss Instit Drofit instit this statem ires a licer ail to licer
AN L HUMAN SA1; OCT-2001 OCT-2001 JAN-2005 roblast 9	Homo sapiens (Human).  Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;  NCBI TaxID=9606;  [1]  SEQUENCE FROM N.A.  MEDLINE=20461777; PubMed=10858 Nishimura T., Nakatake Y., Kon "Identification of a novel FGF the liver.";	Biochim. Biophys.  [2]  [2]  SEQUENCE FROM N.A.  MEDLINE-22887296;  Clark H.F., Gurney Chen J., Chow B.,  Eaton D., Foeter J.  Huang A., Kim H.S.  Lewis L., Liao D.,  Seshagiri S., Simm  Vandlen R., Watana  Vandlen R., Watana  Vi S., Yu G., Yuan  Godowski P. Grav	"The secreted protein discovery effort to identify novel human s bioinformatics assessment."; Genome Res. 13:2265-2270 (2003). [3] SEQUENCE OF 29-43. SEQUENCE OF 29-43. SADDER S., Henzel W.J.; "Signal peptide prediction based verified cleavage sites."; "Signal peptide prediction based verified cleavage sites."; Protein Sci. 13:2819-2824 (2004)!- SUBCELLULAR LOCATION: Secret!- SIMILARITY: Belongs to the h	This SWISS-PK between the k the European E use by non-r modified and t entities requi or send an ema
RESULT 1 FGFL HUM ID FGF AC 09N DT 16- DT 16- DT 25- DE FID GN Nam	2000 X X X X X X X X X X X X X X X X X X	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	C C E E E E E E E E E E E E E E E E E E	888888888

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Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Usgin T.B., Toshiyuki S., Carninci P., Frange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
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Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 1113; DB 1; Length 209; 100.0%; Pred. No. 1.4e-72; tive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                        29 209 Fibroblast growth factor-21.
23 23 Missing (in Ref. 2).
209 AA; 22300 MW; 27925C52A0023823 CRC64;
                                                Genew, HGNC:3678; FGF21.

Go, GO:005576; C:extracellular; TAS.
GO; GO:0005575; C:extracellular; TAS.
GO; GO:0005675; C:extracellular; TAS.
GO; GO:0007657; P:cell-cell signaling; TAS.
GO; GO:0007165; PER002996; Cytok ILI like.
InterPro; IPR002996; Cytok ILI like.
InterPro; IPR002996; ILI HBGF.
R InterPro; IPR00248; ILI HBGF.
R PRINTS; PR00263; HBGFRGF.
R PRINTS; PR00263; ILIHBGF.
R PRODM; PR000831; ILI HBGF.
R PROSITE; PS00247; HBGF FGF; PALSE_NEG.
Direct protein sequencing; Growth factor; Signal.
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01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Fibroblast growth factor 21,.
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EMBL; AB021975; BAA99415.1; -. EMBL; AY359086; AAQ89444.1; -. HSSP; P03968; 1BAR.
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Best Local Similarity 100.09
Matches 209; Conservative
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Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
Jones S.J., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human
and mouse CDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
Submitted (JAN-2002) to the heparin-binding growth factors family.
EMBL, AB078901; BAB84299.1; -.
HSSP; O95750; IPWA.
GO; GO:0008813; F:growth factor activity; IEA.
Pfam; PRO0167; FGF; 1.
PRINTS; PR00263; HBGFPGF.
PRINTS; PR00262; ILLHBGF.
PROD001; PD000831; IL1_HBGF; 1.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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01-WAR-2002 (TrEMBLrel. 20, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                              Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
99.4%; Score 1106; DB 2;
Best Local Similarity 99.5%; Pred. No. 4.6e-72;
Matches 208; Conservative 0; Mismatches 1
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12
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REQUENCE FROM N.A.

REQUENCE FROM N.A.

REDILINE_25154681; PubMed=12466851; DOI=10.1038/nature01266;

RA MEDILINE_25154681; PubMed=12466851; DOI=10.1038/nature01266;

RA AYAGI K., Tomaru Y., Hasgawa T., Adachi J., Bono H., Kondo S.,

RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Glonbach C., Gojobori T.,

RA Baldarelli R., Franapin A., Matsuda H., Batalov S., Beisel K.W.,

RA Baldarelli R., Franapin A., Matsuda H., Batalov S., Beisel K.W.,

RA Baldarelli R., Frazer K.S.,

RA Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,

RA Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,

RA Kanal A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,

RA Kanal A., Kawaji H., Marchioni L., Marchioni L., Miki H.,

RA Gaasterland T., Marchioni L., Marchad B., Lyons P.A.,

RA Magashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,

RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,

RA Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,

RA Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,

RA Verardo R., Wandner L., Wahlestedt C., Wang Y., Watshaba R.,

RA Wulming L.G., Wynshaw-Boris A., Yanagisawa M., Yang I.,

RA Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,

RA Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,

RA Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,

RA Miyazaki A., Sakai E., Shibata R., Shinagawa A.,
                                                                                 7
                                                                                                                                                                               71 GAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLED 130
                                                                                                                                                                                                                       131 GYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGS 190
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                                                                                                                         12 GLWVCLLLPVFILGVCRAYPISDSSPLLQFGGQVRQRYLYTDDDQDTEAHLEIREDGTVV 71
                                                                                                          12 GLWVSVLAGL-LLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVG
                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                               3;
                                                      Length 208;
                                                                                 Indels
                           208 AA; 22857 MW; D232445902CDB8EA CRC64;
                                                                                 27;
                                                      DB 2;
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16-OCT-2001 (Rel. 40, Last sequence update)
15-UUL-2004 (Rel. 44, Last annotation update)
Pibroblast growth factor-21 precursor (FGF-21).
                                                 72.2%; Score 803.5; DB 2
78.9%; Pred. No. 2.8e-50;
                                                                 Best Local Similarity 78.9%; Pred. No. 2.8e-
Matches 157; Conservative 12; Mismatches
                                                                                                                                                                                                                                                                                                                                                                         210 AA.
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                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                            190 SDPLSMVEPLQGRSPSYAS 208
                                                                                                                                                                                                                                                                           191 SDPLSMVGPSQGRSPSYAS 209
                                                                                                                                                                                                                                                                                                                                                                         STANDARD;
SM00442; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=10090;
              factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Name=Fgf21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the liver.
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                           SEQUENCE
                                                      Query Match
              Growth
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72 GAAHRSPESLLELKALKPGVIQILGVKASRFLCQQPDGALYGSPHFDPEACSFRELLLED 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       70
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Yasunishi A., Yoshino M., Waterston R., Lander B.S., Rogers J.,
Birney B., Hayashizaki Y.;
Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cDNAs.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GLWVS-VLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- SIMILARITY: Belongs to the heparin-binding growth factors family.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE 210 AA; 23237 MW; AE02AABA6477E6F0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 71.3%; Score 793.5; DB 1
78.9%; Pred. No. 1.5e-49;
ive 10; Mismatches 31
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MGD; MGI:1861377; Fgf21.
InterPro; IPR008996; Cytok ILI_like.
InterPro; IPR002209; HB/F Growthfact.
InterPro; IPR002348; ILI_HBGF.
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PRINTS, PR00263; HBGFFGF.

PRINTS, PR00262; ILIHBGF.

ProDom, PD000831; ILI HBGF; 1.

SMART; SM00442; FGF; 1.
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Matches 157; Conservative
                                                                                    Nature 420:563-573 (2002)
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SEQUENCE FROM N.A.
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GYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGS 190
                          SEQUENCE FROM N.A.

MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003;

MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003;

Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J.,

Chen J., Chow B., Chui C., Crowley C., Currell B., Denel B., Dowd P.,

A Eaton D., Foster J., Grimadid C., Gu Q., Hass P.E., Heldens S.,

Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee B.,

Lewis L., Liao D., Mark M., Robbie B., Sanchez C., Schoenfeld J.,

Lewis L., Simmons L., Singh J., Santh V., Stinson J., Vagts A.,

Vandlen R., Watanabe C., Wleand D., Woods K., Xie M.-H., Yansura D.,

Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I.,

Godowski P., Gray A.;

"The secreted protein discovery initiative (SPDI), a large-scale

"Ffort to identify novel human secreted and transmembrane proteins: a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Klauener R.D., Collins F.S., Wagner L., Shenmen C.W., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Diatchchenko L., Marusina K., Farmer A.A., Rubin G.W., Hong L.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "FGF-19, a novel fibroblast growth factor with unique specificity for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=99132028; PubMed=9931477; DOI=10.1016/S0167-4781(98)00255-3; Nighlmura T., Utsunomiya Y., Hoshikawa M., Ohuchi H., Itoh N.; "Structure and expression of a novel human FGF, FGF-19, expressed in the fetal brain.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kalnine N., Chen X., Rolfs A., Halleck A., Hines L., Eisenstein S., Koundinya M., Raphael J., Moreira D., Kelley T., LaBaer J., Lin Y., Phelan M., Farmer A.; "Cloning of human full-length CDSs in BD Creator(TM) system donor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
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MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                                                                    (UNQ334/PRO533)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. Xie M.-H., Holcomb I., Deuel B., Dowd P., Huang A., Vagts A., Yeotter J., Brush J., Gu Q., Liang J., Hillan K., Goddard A., Gurney A.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FGFR4."; Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                           16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 46, Last annotation update)
Fibroblast growth factor-19 precursor (FGF-19)
                                                                                                                                                                                                                                                                              216 AA
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                                                                                                  191 SDPLSMVGPSQGRSPSYAS 209
                                                                                                                                                 SDPLSMVEPLQCRSPSYAS 210
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                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (Human).
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                                                                                                                                                                                                                                                                                                                                                                                                                                Name=FGF19;
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Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton B., Ketteman M., Madan A., Rodrigues S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Butterfield Y.S.M., Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.; Genein J.E., Jones S.J.M., Marra M.A.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       embryogenesis.
--- SUBCELLUAR LOCATION: Secreted.
--- TISSUB SPECIFICITY: Expressed only in fetal brain.
--- SIMILARITY: Belongs to the heparin-binding growth factors family.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Signal peride prediction based on analysis of experimentally verified cleavage sites.";
Protein Sci. 13:2819-2824(2004).
-!- FUNCTION: May be involved in brain development during
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23.8%; Score 265; DB 1; Length 216; 36.3%; Pred. No. 1.8e-11; ive 27; Mismatches 82; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                            Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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PubMed=15340161; DOI=10.1110/ps.04682504;
Zhang Z., Henzel W.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or send an email to license@isb-sib.ch).
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InterPro; IPR008996; Cytok ILI 11ke.
InterPro; IPR002209; HB/F growthfact.
InterPro; IPR002348; ILI_HBGF.
Pfam; PF00167; FGF; 1.
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EMBL, AF110400; AA045973.1; --
EMBL, AY358302; AAQ88669.1; --
EMBL, BT016729; AAP35375.1; --
EMBL, BC017664; AAH17664.1; --
EMBL, BC017664; AAH17664.1; --
Genew; HGNC:3675; PGF19.
H-InvDB, HIX0009891; --
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PRINTS; PRO0262; ILLHBGF.
PRODOM; PRO00831; ILL HBGF; 1.
PROSITE; PS00247; HBGF_FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                          cDNA sequences.";
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Matches 77; Conservative
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EMBL; AB078777; BAB84108.1; -. HSSP; P03968; 1BAR.
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wes 71; Conserv
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                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10116;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstarion the buspean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              58
                                                                                                                                                                                                                                                                                                         the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12 GLWVSVLAGLLLGACQ---AHPIPDSSPLL--QFGGQVRQRYLYTDDAQQTEAHLEIRED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 GTCLRLLVGVLCTVCSLGTARAYPDTSPLLGSNWGSLT---HLYTATA-RTSYHLQIHRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ventrolateral thalamic nucleus. SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nat. Genet. 26:345-348(2000).
-!- SUBCELULAR LOCATION: Secreted (Potential).
-!- TISSUB SPECIFICITY: Mainly expressed in the brain and thymus at low levels. In brain; preferentially expressed in the
                                                                                                                                                                                                                                                               MEDLINE=20490027; PubMed=11032749; DOI=10.1006/bbrc.2000.3696; Manashita T., Yoshioka M., Itoh N.; Identification of a novel fibroblast growth factor, FGF-23, preferentially expressed in the ventrolateral thalamic nucleus of
                                                                                                                                                                               Mus musculus (Mouse).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                  STRAIN=BALB/c; TISSUE=Embryo;
MEDLINE=20517346; PubMed=11062477;
White K.E., Evans W.E., O'Riordan J.L.H., Speer M.C., Econs M.J.,
Lorenz-Depiereux B., Grabowski M., Meitinger T., Strom T.M.;
"Autosomal dominant hypophosphataemic rickets is associated with
mutations in FGP23.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 251;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           85; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         251 Fibroblast growth factor-23.
27757 MW; 110C1F2C735DC360 CRC64;
                                                                                                                                                                                                                                                                                                                                 lochem. Biophys. Res. Commun. 277:494-498(2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22.4%; Score 249.5; DB 1
35.1%; Pred. No. 2.7e-10;
tive 27; Mismatches 85
                                                                                                                16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-UTL-2004 (Rel. 44, Last annotation update)
Pibroblast growth factor-23 precursor (FGF-23)
 ----LAPOPPDVGSSDPLSMV-GPSQGRSPSY 207
                183 LESDMFSSPLETDSMDPFGLVTGLEAVRSPSF 214
                                                                                          251 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRINTS; PR00262; 1L1HBGF.
PRODOM; PD000831; IL1 HBGF; 1.
SWART; SM00442; PGF; 1.
PROSITE; PS00247; HBGF_FGF; FALSE_NEG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR008996; Cytok IL1 like.
InterPro; IPR002348; IL1 HBGF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AB037889; BAB13478.1; -. EMBL; AF263536; AAG09916.1; -. PIR; JC7513; JC7513.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best_Local Similarity 35.19
Matches 73; Conservative
                                                                                         STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HSSP; P03968; 1BAR.
MGD; MGI:1891427; Fgf23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Growth factor; Signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        251 AA;
                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                       NCBI_TaxID=10090;
                                                                                         FGPN MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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GTVGGAADQSPESLLOLKALKPGVIQILGVKTSRPLCQRPDGALYGSLHFDPEACSFREL 126
                                          GHVDGTPHQTIYSALMITSEDAGSVVITGAMTRRFLCMDLHGNIFGSLHFSPENCKFRQW 118
                                                                                                                                                LLEDGYNVYQSBAHGLPLHLPGNK---SPHRDPAPRGPARFL-----PLPGLPPALPEP 177
                                                                                                                                                                                                                      119 TLENGYDVYLSQKHHYLVSLGRAKRIFQPGTNPPPF--SQFLARRNEVPLLHFYTVRPRR 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTVGGAADQSPESILQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFREL 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    127 LLEDGYNVYOSEAHGLPLHLPGNK---SPHRDPAPRGPARFL-----PLPGLPPALPEP 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   119 TLENGYDVYLSPKHYLVSLGRSKRIFQPGTNPPPF--SQFLARRNEVPLLHFYTARPRR 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12 GLWVSVLAGLLLGACQ---AHPIPDSSPLL--QFGGQVRQRYLYTDDAQQTEAHLEIRED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Rattus norvegicus fgf23.";
Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
-!- SUBCELLULAR LOCATION: Secreted (Potential).
-!- SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23;
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251 AA; 27911 MW; 35A229B1B3900593 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21.2%; Score 235.5; DB 1
34.1%; Pred. No. 2.8e-09;
tive 28; Mismatches 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
29-UUL-2004 (Rel. 44, Last annotation update)
Pibroblast growth factor-23 precursor (FGF-23)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  251 AA
                                                                                                                                                                                                                                                                                                 PGILAPQPPDVGSSDPLSMVGPSQGRSP 205
                                                                                                                                                                                                                                                                                                                                            177 HTRSAEDPPE---RDPLNVLKPRPRATP 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RGD; 620178; FGE23.
InterPro; IPR008996; Cytok IL1 like.
InterPro; IPR008998; IL1 HBGF.
Pfam; PF00167; FGF; IL1 HBGF; I.
SMART; SM00442; FGF; I.
PROSITE; PS00247; HBGF; FALSE_NEG.
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RESULT
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Livingston R.J., Rieder M.J., Chung M.-W., Ritchie T.K., Olson A.N.,
Nguyen C.P., Nguyen D.A., Poel C.L., Robertson P.D., Schackwitz W.S.,
Sherwood J.K., Sherwood A.M., Leithauser B.J., Nickerson D.A.;
NIEHS-SNPs, environmental genome project, NIEHS ES15478, Department
of Genome Sciences, Seattle, WA (URL: http://egp.gs.washington.edu).";
Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=21267444; PubMed=11344269; DOI=10.1073/pnas.101545198; Shimada T., Mizuteni S., Muto T., Yoneya T., Hino R., Takeda S., Takeuchi Y., Fujita T., Fulmoto S., Yamashita T., Fujita T., Fulmoto S., Yamashita T., "Cloning and characterization of FGF23 as a causative factor of tumor-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: bioinformatics assessment."; Genome Res. 13:2265-2270(2003).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003; Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J., Chai C., Crowley C., Currell B., Deuel B., Dowd P. Baton D., Foster J., Claimwald C., Gu Q., Hass P.E., Heldens S., Huang A., Kim H.S., Klimwaki L., Jin Y., Johnson S., Lee J., Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Schoenfeld J., Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A., Yandlen R., Watanabe C., Wieand D., Woods K., Xie M.-H., Yansura D., Yi S., Yu G., Yuan J., Zhang Z., Goddard A., Wood W.I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A., VARIANTS ADHR GLN-176; GLN-179 AND TRP-179, AND
                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           White K.E., Evans W.E., O'Riordan J.L.H., Speer M.C., Econs M.J., Lorenz-Depiereux B., Grabowski M., Meitinger T., Strom T.M.; "Autosomal dominant hypophosphataemic rickets is associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Yamashita T., Yoshioka M., Itoh N.;
"Identification of a novel fibroblast growth factor, FGF-23,
preferentially expressed in the ventrolateral thalamic nucleus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 25-19.
PubMed=15540161; DOI=10.1110/ps.04682504;
Zhang Z., Henzel W.J.;
Signal peptide prediction based on analysis of experimentally
                                                                                                                                                                                                                                                            16-OCT-2001 (Rel. 40, Last sequence update)
25-JAN-2005 (Rel. 46, Last amnotation update)
Fibroblast growth factor-23 precursor (FGF-23) (Tumor-derived hypophosphatemia inducing factor) (UNQ3027/PRO9828).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=20490027; PubMed=11032749; DOI=10.1006/bbrc.2000.3696;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Biochem. Biophys. Res. Commun. 277:494-498(2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           induced osteomalacia.";
Proc. Natl. Acad. Sci. U.S.A. 98:6500-6505(2001)
                                                                                                                                                                                   251 AA
178 PGILAPQPPDVGSSDPLSMVGPSQGRSP 205
                             177 HTRSAEDPPE---RDPLNVLKPRPRATP 201
                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=20517346; PubMed=11062477;
                                                                                                                                                                                                                                    (Rel. 40, Created)
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                                                                                                                                                                                                                                                                                                                                                                      Name=FGF23; Synonyms=HYPF;
                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mutations in FGF23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9606;
                                                                                                                                                                                                                                 16-OCT-2001
                                                                                                                                                                             FGFN HUMAN
Q9GZV9;
                                                                                                                                                          HUMAN
                                                                                                                                                                                                           HANGE BERTHER 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 NGYDVYHSPOYHFLVSL------GRAKRAFLFGMNP----PPYSOFLSRRNEI 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
verified cleavage sites.";

Protein Sci. 13:2819-2824(2004).
-!- SUBCELJULAR LOCATION: Secreted (Potential).
-!- DISEASE: Defects in FGF23 are the cause of autosomal dominant hypophosphataemic rickets (ADHR) [MIM:193100]. ADHR is characterized by low serum phosphorus concentrations, rickets, osteomalacia, leg deformities, short stature, bone pain and dental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70 GGAADQSPESILQLKALKPGVIQILGVKTSRFLCQRPDGALYGSIHPDPEACSFRELLLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13 LWVSVLAGLL-LGACOAHPIPDSSPLL--OFGGOVRORYLYTDDAQQTEAHLEIREDGTV
                                                                                                                                                                             abscesses.
SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20.0%; Score 222.5; DB 1; Length 251; 30.8%; Pred. No. 2.4e-08; Live 36; Mismatches 70; Indels 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Direct protein sequencing; Disease mutation; Growth factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             factor-23
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/FTId=VAR_018887.
T -> M (in dbSNP:7955866).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6093BD0CC50C2489 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---GILAPQP-----PDVGSSDPLSMVGPSQGRSPSYAS 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fibroblast growth f.
R -> Q (in ADIR).
FTIG=VAR. 010717.
R -> Q (in ADHR).
/FTIG=VAR. 010719.
R -> W (in ADHR).
/FTIG=VAR. 010718.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /FTId=VAR 010720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GO; GO:0005615; C:extracellular space; NAS. GO: 00:0030154; P:cell differentiation; NAS. InterPro; IPR008996; Cytok ILL like. InterPro; IPR002348; ILL HBGF. Pfam; PF00167; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProDom; PD000831; ILL HBGF; 1.
PROSITE; PS00247; HBGF_FGF; FALSE_NEG.
                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AB037973; BAB13477.1; -.
EMBL; AF265537; AAG09917.1; -
EMBL; AB047858; BAB55889.1; -.
EMBL; AY368323; AAQ08689.1; -.
EMBL; AY366236; AAS59157.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  251 AA; 27954 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRINTS; PR00262; IL1HBGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HSSP; Q02195; 1QQK.
Genew; HGNC:3680; FGF23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                195
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251
176
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Polymorphism; Signal SIGNAL 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25
176
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MIM; 605380; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           193100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        179
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VARIANT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MIM;
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10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GYNVYQSEAHGLPLHLPGNKSPH----RDPAPRGPARFLPLPGLPPA------ 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GYNVYKSKKYGISVSLSSAKQRQQFKGKDFLPL--SHFLPMINTVPVEVTDFGEYGDYSQ 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                74
                                                                                                                                                                                                                                                                                                                                                                                                                                                          18 LAGLLICACOAH--PIPD-SSPLLOFG-GQ-VRORYLYTDDAQQ--TEAHLEIREDGTVG 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AVGSQSPQSLLEIRAVAVRTVAIKGVQSSRYLCMDEAGRLHGQLSYSIEDCSPEEEIRPD
                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 LLGIAAAAAAARSLPLPDVGGPHVNYGWGEPIRLRHLLHRPGKHGLFSCFLRIGGDGRVD
                                                                                                                                                                                                                      Science 290:1965-1967(2000).
-!- SIMILARITY: Belongs to the heparin-binding growth factors family.
EMBL; AF115355; AAG39478.1; -.
HSSP; O95750; IPWA.
                                                                                                                                                                 MEDLINE=20564778; PubMed=11110663; DOI=10.1126/science.290.5498.1965; Ladher R.K., Anakwe K.U., Gurney A.L., Schoenwolf G.C., Prancis-West P.H.; "Identification of synergistic signals initiating inner ear
                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                     33;
                                                                                                                                                                                                                                                                                                                                                                                                              19.5%; Score 216.5; DB 2; Length 227; 30.9%; Pred. No. 5.8e-08; Live 33; Mismatches 84; Indels 33.
                                                                                                                                                                                                                                                                                                                                                                                         227 AA; 24568 MW; 875D76FBFD09F8E2 CRC64;
                               01-WAR-2001 (TrEMBLrel. 16, Created)
1-WAR-2001 (TrEMBLrel. 16, Last sequence update)
01-WAR-2004 (TrEMBLrel. 26, Last annotation update)
Pibroblast growth factor 19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        193 AFBPE----VYSSPLETDSMDPFGITSKLSPVKSPSF 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            174 -- LPEPPGILAPQPPDVGSSDPLSMVGP-SQGRSPSY 207
                                                                                                                                                                                                                                                                GO; GO:0008083; F:growth factor activity; IEA. InterPro; IPR008995; Cytok IL1 like. IPR002209; HB/F growthfact. InterPro; IPR002348; IL1_HBGP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-UTL-1999 (Rel. 38, Created)
15-UUL-1999 (Rel. 38, Last sequence update)
05-UUL-2004 (Rel. 44, Last annotation update)
Pibroblast growth factor-15 precursor (FGF-15)
           227 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       218 AA
                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS00247; HBGF_FGF; UNKNOWN_1. Growth factor.
                                                                                                                                                                                                                                                                                                            Pfam; PF00167; FGF; 1.
PRINTS; PR00263; HBGPFGF.
PRINTS; PR00263; HBGPFGF.
PRODOM; PR000831; ILL HBGF; 1.
SMART; SM00442; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 30.9% tes 67; Conservative
           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                      Gallus gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse).
                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10090;
                                                                                                                               NCBI_TaxID=9031;
                                                                                                                                                                                                              development."
                                                                             Name=fgf-19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FGFF MOUSE
035622;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Name=Fqf15;
                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     135
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
           ONGG60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
Q9DDN0
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REMEDINES-9763-279 Pubmed-1310117,

REMEDINES-1763-279 Pubmed-1310117,

REMEDINES-1763-279 Pubmed-1310117,

REMEDINES-1763-279 Pubmed-1310117,

REMEDINES-1763-279 Pubmed-1310117,

REMEDINES-1763-279,

REMEDINES-1763-279
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GAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLED 130
                                                                                                                                                                                                                                                                                                                 274 AA.
                                                                                                                                                                                               195 SDSMDPFRWVEDVDHLVKSPSF 216
                                                                                                                                                                    188 VGSSDPLSMVGPSQG--RSPSY 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 1-102 FROM N.A.
MEDLINE=88296404; PubMed=2841106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Name=Fgf3; Synonyms=Fgf-3, Int-2; Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBO J. 7:1013-1022(1988).
                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHARACTERIZATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      growth factors.
                                                                                                                                                                                                                                                                                                                      MOUSE
                                                                                                                                                                                                                                                                              RESULT 12
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modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      71 GAADQSPESILIQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLED 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13 LWVSVLAGLLLGACQAHPIPDSSPLLQFG-GQV-RQRYLYTDDAQQTEAHLEIREDGTVG 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 LWLAVSGRPL--AQQSQSVSDEDPLFLYGWGKITRLQYLYSAGPYVSNCFLRIRSDGSVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13 LWVSVLAGLILGACQAHPIPDSSPLLQFG-GQV-RQRYLYTDDAQQTEAHLEIREDGTVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2
                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
18.6%; Score 206.5; DB 2; Length 218;
Best Local Similarity 30.7%; Pred. No. 2.9e-07;
Matches 62; Conservative 37; Mismatches 92; Indels 11
                                                                                                                                                                                                                                                                                                                                                                                   Fibroblast growth factor-15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Itch N.;
Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AB078900; BAB84298.1; -.
HSSP; O95750; IPRA.
                                                                                                                                                                                                                                                                                                                                                                                                       218 AA; 25236 MW; A96B0D771FB125A5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00247; HBGF FGF; 1.
SEQUENCE 218 AA; 25207 MW; ED898684B5307C58 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-WAR-2002 (TrEMBLrel. 20, Created)
01-WAR-2002 (TrEMBLrel. 20, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Fibroblast growth factor 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPL 167
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 18.6%; Score 206.5; DB 1;
Best Local Similarity 33.8%; Pred. No. 2.9e-07;
Matches 53; Conservative 29; Mismatches 70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GO, GO:0008083; F:growth factor activity; IEA. Pfam; PF00167; FGF; 1. PRINTS; PR00262; ILLHBGG. SMART; SM00442; FGF; 1.
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                                                                                                                                                                                                                                                                                                                                                               Potential.
                                                                                                                                              HSSP; Q02195; 1QQK.
MGD; MGI:1096383; Fgf15.
InterPro; IPR008996; Cytok_IL1_like.
InterPro; IPR002348; IL1_HBGF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                 EMBL; AF007268; AAB63197.1; -. EMBL; AK017829; BAB30961.1; -. EMBL; BC021328; AAH21328.1; -.
                                                                                                                                                                                                                                                      PRINTS; PR00262; ILLHBGF.
ProDom, PD000811; ILL HBGF; 1.
SMART; SM0142; FGF; 1.
PROSITE; PS00247; HBGF_FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus norvegicus (Rat)
                                                                                                                                                                                                                                                                                                                                                                                   218
                                                                                                                                                                                                                                    Pfam; PF00167; FGF; 1
                                                                                                                                                                                                                                                                                                                                            Growth factor; Signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Name=FGF15;
                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08VI81
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131 GYNVYQSEAHGLPLHLPGNKS-PHRDPAPRGPARFLPL--PGLPPALPEPPGILAPQPPD 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- INDUCTION: By integration of mouse mammary tumor virus.
-!- PTM: Glycosylated.
-!- SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. (ISOFORMS 1 AND 2), ALTERNATIVE INITIATION, SUBCELLULAR LOCATION, AND MUTHAGENESIS OF ASN-94.
MEDLINE-80158795; PubMed-2406607; DOI=10.1038/343662a0;
Acland P., Dixon M., Peters G., Dickson C.;
"Subcellular fate of the int-2 oncoprotein is determined by choice of initiation codon.";
Nature 343:662-665(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              family.",
J. Cell Sci. Suppl. 13:87-96(1990).
--- FUNCTION: Could be involved in ear development.
--- SUBCELLULAR LOCATION: Nucleus (isoform 1). Endoplasmic reticulum and Golgi (isoform 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=91193291; PubMed=1964688; Dickson C., Deed R., McAllan D., Dickson C., Acland P., Smith R., Dixon M., Deed R., McAllan D., Walther W., Fuller-Pace F., Medler P., Peters G.; "Characterization of int-2: a member of the fibroblast growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P05554; 061736;
01-NOV-1988 (Rel. 09, Created)
25-OCT-2004 (Rel. 45, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
INT-2 proto-oncogene protein precursor (Fibroblast growth factor-3)
(FGF-3) (HBGF-3).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=86247582; PubMed=3013624; Moore R., Casey G., Brookes S., Dixon M., Peters G., Dickson C.; Moore R., Casey G., Brookes S., Dixon M., Peters G., Dickson C.; Sequence, topography and protein coding potential of mouse int-2: putative oncogene activated by mouse mammary tumour virus."; EMBO J. 5:919-924(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Les musocratos (modase).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Smith R., Peters G., Dickson C.; "Multiple RNAs expressed from the int-2 gene in mouse embryonal carcinoma cell lines encode a protein with homology to fibroblast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Event=Alternative initiation;
Comment=2 isoforms, 1 (shown here) and 2, are produced by
alternative initiation. Isoform 1 starts at an alternative
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RESULT
            SOUTH TARKET TO THE TARKET TO 
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use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                    EMBL; X52014; CAA65611.; .

REMBL; X00848; CAA68767.1; ALT_INIT.

RISP, A23930; TWANST.

RISP; O15520; INUN.

ROD; MGI:95517; Fgf3.

CO; GO:001759; Frinduction of an organ; IMP.

RICEPPC; IPR002209; HB/P_GrowThfact.

RICEPPC; IPR002346; IL1 HBGF.

RICEPPC; IPR0024346; IL1 HBGF.

RINTS; PR00263; HBGFFGF.

RRINTS; PR00263; HBGF FGF; I.

RRAT; SMO0442; FGF; I.

RART; SMO0442; FGF; I.

RALEATATION DOTE OF CONTROPER CON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41 GGOVRORYLYTDDAQOTEAHLEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSR 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69 GGAPRRKKIYC----ATKYHLQLHPSGRVNGSLENSAYSILEITAVEVGVVAIKGLFSGR 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101 FLCORPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAHGLPLHLPGNKSP--HRDPAP 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      159 RGP-----ARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMVGPSQGRSPSYAS 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            179 ORPWYVSVNGKGRPRRGFKTRRTQKSSLFLPRVLGHKDHEMVRLLQSSQPRAPGEGS 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oncogene 4:429-436(1989).
-!- FUNCTION: Could be involved in ear development.
-!- SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=Placenta;
MEDLINE=89239468; PubMed=2470007;
Brooks S., Smith R., Casey G., Dickson C., Peters G.;
"Sequence organization of the human int-2 gene and its expression in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78; Indels 18; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-OCT-1989 (Rel. 12, Created)
01-OCT-1989 (Rel. 12, Last sequence update)
01-OCT-1989 (Rel. 44, Last annotation update)
INT-2 proto-oncogene protein precursor (Fibroblast growth factor-3)
(FGF:3) (HBGF-3).
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Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16.1%; Score 179; DB 1; Length 274; 28.8%; Pred. No. 3.6e-05; ive 30; Mismatches 78; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              239 AA
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Best Local Similarity
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between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its way mon-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41 GGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSR 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101 FLCQRPDGALYGSLHFDPBACSFRELLLEDGYNVYQSRAHGLPLHLPGNKSPHRDPAP-- 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40 GGAPRRRKLYC----ATKYHLOLHPSGRVNGSLENSAYSILEITAVEVGIVAIRGLFSGR 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "An unexpected transforming gene in calf-thymus carrier DNA: bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 152 LWYVSVNGKGRPRRGFKTRRTQKSSLFLPRVLDHRDHEMVRQLQSGLPRPPG 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Cetartiodactyla, Ruminantia, Pecora, Bovidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41;
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01-FEB-1996 (Rel. 33, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Fibroblast growth factor-4 precursor (FGF-4) (Heparin secretory transforming protein) (HSI) (HBGF-4).
Name-FGF4; Synonyms-HSI;
Bos taurus (Bovine).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.9%; Score 177.5; DB 1; Length 239; 29.7%; Pred. No. 4e-05; ive 23; Mismatches 57; Indels 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00247; HEGF FGF; 1.
Glycoprotein, Growth factor, Mitogen; Proto-oncogene; Signal.
SIGNAL 17 Potential.
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GO; GO:0005576; C:extracellular; TAS.
GO; GO:0008053; F:growth factor activity; TAS.
GO; GO:0008053; F:growth factor activity; TAS.
GO; GO:0007267; P:cell-cell signaling; TAS.
GO; GO:0007165; P:signal transduction; TAS.
InterPro; IPR002909; Cytok ILL like.
InterPro; IPR002309; HB/P growthfact.
InterPro; IPR002309; HB/P growthfact.
PFAM; PR00167; FGF; I.
PRINTS; PR00167; FGF; I.
PRINTS; PR00167; FGF; I.
PRODM; PR000831; ILLIHBGF.
PRODM; PR000831; ILLIHBGF; I.
SMART; SM00442; FGF; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            206 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               239 AA; 26886 MW;
                                                                                                                                                                                                       EMBL; X14445; CAA32615.1; -. PIR; S04742; S04742.
HSSP; O15520; 1NUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    51; Conservative
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                                                                                                                                                                                                                                                                                          Genew; HGNC:3681; FGF3.
MIM; 164950; -.
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Gene 162:333-334(1995).
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                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46 WESLVARSILAGI.PVAAQPKEAAVQSGAGDYILGIKRI.RRLYCNVG--IGFHLQVI.PDGR 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                69 VGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLL 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14 WVSVLAGLLLGACQAHPIPDSSPLLQFGGQV----RQRYLYTDDAQQTEAHLEIREDGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY: Belongs to the heparin-binding growth factors family.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neopterygii, Teleostei, Ostariophysi, Cypriniformes,
Cyprinidae, Danio.
NCBI_TaxID=7955;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 206;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL 1 29 Potential.
CHAIN 30 206 Fibroblast growth factor-4.
SEQUENCE 206 AA; 22041 MW; P9B7A86066E56613 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 129 EDGYNVYQSEAH-GLPLHLPGN---KSPHRDPAPRGPARFLP 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-WAR-2003 (TrEMBLrel. 23, Created)
1-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-WAR-2004 (TrEMBLrel. 26, Last annotation update)
Fibroblast growth factor 6.
                                                                                                                                                                                                                                                                                                                         HSSP; P08620; 11JT.
InterPro; IPR008996; Cytck ILL like.
InterPro; IPR008299; HB/F growthfact.
InterPro; IPR0022348; ILL_HBGF.
Pfam; PF00167; FGF; 1.
PRINTS; PR00263; HBGFRGF.
PRINTS; PR00263; ILLHBGF.
PRODM; PR000831; ILLHBGF.
ProDom; P0000831; ILLHBGF; 1.
PROSTT; SM00442; FGF; 1.
PROSTTF; PS00247; HBGF_FGF; 1.
Growth factor; Mitogen; Signal.
SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ch 15.9%; Score 177; DB 1; Similarity 32.1%; Pred. No. 3.7e-05; 52; Conservative 23; Mismatches 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZFIN; ZDB-GENE-980526-559; fgf6.
GO; GO:0008083; P:growth factor activity; IEA.
InterPro; IPR008996; Cytok_ILI_like.
InterPro; IPR002209; HB/F growthfact.
InterPro; IPR002348; ILI_HBGF.
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PRINTS; PROOZ63; HAGFFGF.
PROOZ62; LLIHGFFF.
PRODOM; PDO00831; ILI_HBGF; 1.
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73 SDYLL---GIKRVRRLYCNVG--IGFHLQVLPDGRINGVHNENQYSLIEISAVERGVVSL 127
                                                                                                                                                                                                                                                                                                                                         94 LGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAH-GLPLHLPGN--- 149
                                                                                                                                                                                                                                                                                                                                                              33
                                                                                                                                                                                                       34 SSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESLLQLKALKPGVIQI
                                                                                                                                            Gaps
                                                                                                                                          45;
                                                                                                Length 205;
                                                                                                                                          Indels
                                                           205 AA; 23244 MW; 2BDB1D93D6533696 CRC64;
                                                                                                15.9%; Score 176.5; DB 2; 28.4%; Pred. No. 4e-05; ative 26; Mismatches 70;
                                                                                                                                                                                 9 EHSGLW---VSVLAGLLLGACQAHPIPD----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              completed: July 8, 2005, 22:18:01
ne : 252.671 secs
SMART; SM00442; FGF; 1.
PROSITE; PS00247; HBGF_FGF; 1.
Growth factor.
                                                                                                                                                                                                                                                                                                                                                                                                                      150 KSPHRDPAPRGPARFLP 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                             187 KRGHRASPAMTVTHFLP 203
                                                                                                                                          56; Conservative
                                                                                                                 Best Local Similarity
Matches 56; Conserv
                                                             SEQUENCE
                                                                                                       Query Match
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The present sequence represents an epitope-bearing portion of human fibroblast growth factor-21 (FGF-21). FGF proteins regulate growth and differentiation of a variety of cell types. FGF-21 nucleic acids and polypeptides are useful for treating diseases and disorders characterised by inadequate numbers of hepatic cells, preferably cirrhosis of the liver. They may also be used in the treatment of infertility, impotence, and testicular cancer, as well as leukemia, lymphoma, autoimmune disease, or proliferative disorders of the thymus
                                                                                                                                                                                                                          AAB68418 standard; peptide; 16 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 16 AA;
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                                                                                                                                                                                                                                                                                                                               Homo sapiens
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                                                  July 8, 2005, 21:53:57; Search time 20.9333 Seconds (without alignments) 295.613 Million cell updates/sec
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Abb81312
Ad581312
Ad51312
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Ad0150965
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Ad031733
Abj72266
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Abj72394
Ad0337338
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Adb83568 R
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Adb78297 R
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                              2105692 segs, 386760381 residues
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                                                                                                                                                                                                         Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                  - protein search, using sw model
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ABJ72266
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AAE05078
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ABG32358
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Gapop 10.0 , Gapext 0.5
                                                                                                     1 RORYLYTDDAQQTEAH 16
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geneseqp19908:*
geneseqp20008:*
geneseqp20018:*
geneseqp2003as:*
geneseqp2003as:*
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length: 200000000
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86
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Bed
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                                  OM protein
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Maximum DB
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Adb78051	Adb87117	Adb84699	Adb83814	Adb72969	Adc36807	Adc21797	Adc49828	Adc49027	Adc49544	Adc47405	Adc47150	Adc78025	Add06260	Adc77779	Add50742	Add50988	Add50469	Add50223	Add51234	
ADB78051	ADB87117	ADB84699	ADB83814	ADB72969	ADC36807	ADC21797	ADC49828	ADC49027	ADC49544	ADC47405	ADC47150	ADC78025	ADD06260	ADC77779	ADD50742	ADD50988	ADD50469	ADD5023	ADD51234	
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98	.98	98	86	98	86	98	86	86	98	86	98	98	98	98	98	86	86	98	98	
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	

## ALIGNMENTS

nucleic acid molecule useful for treating disease, e.g. infertility, Fibroblast growth factor-21, FGF-21, cell growth, cell differentiation, hepatic cell, cirrhosis, infertility, impotence, testicular cancer, leukemla; lymphoma; autoimmune disease, thymus proliferative disorder. Epitope-bearing portion of human fibroblast growth factor-21 (FGF-21). Claim 17; Page 39; 61pp; English. impotence, or testicular cancer. 18-NOV-1999; 99US-0166540P. 16-NOV-2000; 2000WO-US031745 23-JUL-2001 (first entry) Itoh N, Kavanaugh WM; (CHIR ) CHIRON CORP. (KYOU ) UNIV KYOTO. WPI; 2001-343823/36.

us-10-060-765-7.rag

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WPI; 2002-479754/51.
                                                                                                                                                                                                                                                                                                                                                             Sequence 91 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-MAY-2002.
                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a novel isolated polypeptide (NOVX) comprising smature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, anorectic, cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide, antibacterial, fungicide, protozoacide, nootropic, neuroprotective, antiparkinsonian, anticonvulsant, osteopathic, antiarthritic, antiinflammatory, dermatological, antiasthmatic, antilathriticy. A polymucleotide of the invention may have a use in gene therapy. The polypeptides, nucleic acid molecules and antibodies
                                                                                                                                                                                                                               antiarteriosclerotic; anorectic; vincide; antibaccerial; fungicide; protozoacide; nootropic; neuroprotective; antibaccerial; fungicide; protozoacide; nootropic; neuroprotective; antibarkinsonian; dermatological; nottasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; FGRA; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; antileukoproteinase-1 precursor; antileukoproteinase-1 precursor; LY-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                      Gaps
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0
Length 16;
                     0; Indels
                                                                                                                                                                                                                       anorectic; cardiant; hypotensive;
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Score 86; DB 4; I Pred. No. 3.1e-08;
                     Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 60; 214pp; English.
                                                                                                                             ADL57115 standard; protein; 91 AA.
                                                                                                                                                                                               Human NOV6d protein SEQ ID NO:60.
                      .;
0
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16-SEP-2002; 2002US-041030P.

16-SEP-2002; 2002US-0411060P.

23-SEP-2002; 2002US-0412766P.

23-SEP-2002; 2002US-041285SP.

24-SEP-2002; 2002US-0413342P.

25-SEP-2002; 2002US-0413342P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Guo X, Anderson DW,
100.0%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                             09-SEP-2003; 2003WO-US028141.
                                             1 RORYLYTDDAQQTEAH 16
                                                         30-SEP-2002; 2002US-0414832P
                                                                                                                                                                          (first entry)
                     16; Conservative
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                                                                                                                                                                                                                       antidiabetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-315567/29.
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB; ADL57114.
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                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
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                                                                                                                                                                          03-JUN-2004
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                                                                                                                                                    ADL57115;
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                      Matches
                                                                                                      RESULT 2
                                                                                                                  ADL57115
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are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders, diabetes, obesity, infectious diseases such as metabolic disorders, diabetes, parkinson's disease, variatious diseases (viral, bacterial, fungal, conferential, atherosclerosis), anorexia, cancer, cardiovascular diseases (hypertension, atherosclerosis), incurdegenerative disorders, Alzheimer's disease, Parkinson's disease, epilopsy, immune disorders and polypeptides consertaritis), haematopoietic disorders, inflammatory skin disorders, asthma, and various dyslipidaemias. The nucleic acids and polypeptides conservable. The medulate or inhibit e.g. neurogenesis, call differentiation, cell proliferation, haematopoiesis, wound healing and angiogenesis, in gene therapy, in generation of antibodies that bind immunospecifically to Novx substances for use in therapeutic or diagnostic methods. The nucleic acids are further used a hybridisation probes, in chromosome mapping, trissue typing, preventive medicine, and pharmacogenomics. The NovX polypeptides of the invention show homology to certain known human conference in Nov2a shows homology to fibroblast growth factor receptor (FGFR4); Nov2a-5c show homology to tiproblast growth factor receptor (FGFR4); Nov7a-7c show homology to alpha-2 macroglobulin-like conference in the antibute of polypeptide variants; Nov8a-5c show homology to alpha-2 macroglobulin-like conference in the protein-like; Nov1a-11; show homology to contain shows hom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -dynorphin precursor. The present sequence represents a NOVX polypeptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bogin O, Adar R, Yayon A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           45 RORYLYTDDAQOTEAH
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of the invention.
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The present invention describes an active variant (1) of a fibroblast C growth factor (FGF) having at least one mutation in the beta-8-beta-9 (1000), having enhanced specificity for one receptor subtype compared to the corresponding wild type FGF, by decreasing the biological activity andiated by at least one receptor subtype while retaining the activity of mediated through another receptor subtype. (1) has cytostatic, vulnerary, osteopathic and antiarthritic activities. (1) can be used as a regulator of vasculogenesis or angiogenesis. (1) is useful for preparing a bnormal FGF receptors (FGFRs), especially skeletal disorders, cancer, to canhance bone fracture healing or bone growth processes and wound healing processes. (1) is useful in detection and treatment of various FGFR crelated disorders including skeletal disorders e.g. achondroplasia, crelated disorders such as transitional cell carcinoma of the bladder and cervical carcinoma. The novel mutants are useful in high expression systems suitable for pharmaceutical production, targeting of drugs or other agents to tissues and cells having specific FGFR subtypes, and serve as template for pharmaceutical production, targeting of and serve as template for the formations such as skeletal disorders and antegonists of FGFRs in various figoroes agonists of farsue and calls may as skeletal disorders and cancer. The present sequence represents a FGF core structure amino acid sequence which is given in the exemplification of the present invention
                        New variants of fibroblast growth factor, useful for treating skeletal disorders including osteoporosis, malignancies and to enhance wound and
                                                                                                                                              Disclosure; Fig 1; 74pp; English.
                                                                                   fracture healing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 124 AA;
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New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,

Claim 1; SEQ ID NO 52; 214pp; English.

asthma, or infections

Padigaru M, Rieger DK;

Ort T,

Guo X, Anderson DW,

Zhong M,

2004-315567/29.

N-PSDB; ADL57106

2002US-0412766P.

2002US-0411060P

12-SEP-2002; 16-SEP-2002; 23-SEP-2002;

23-SEP-2002; 2002US-0412825P. 24-SEP-2002; 2002US-0412767P. 25-SEP-2002; 2002US-0413342P.

25-SEP-2002; 2002US-0413342P 30-SEP-2002; 2002US-0414832P

(CURA-) CURAGEN CORP.

Gaps ö Length 124; 100.0%; Score 86; DB 5; Length 12 100.0%; Pred. No. 3.2e-07; ive 0; Mismatches 0; Indels Query Match Best Local Similarity 100.0 Matches 16; Conservative

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ADL57107 standard; protein; 125 AA. Human NOV5c protein SEQ ID NO:52. 03-JUN-2004 (first entry) ADL57107; RESULT 4 ADL57107

antionoulism; osteopathic, antiarthritic, antiinflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy; dermatological; antiasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; FGFR4; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; alpha-2 macroglobulin-like polypeptide variant; antileukoproteinase 1 precursor; LIV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor. antiarteriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; human; antidiabetic; anorectic; cardiant; hypotensive; 

Homo sapiens.

WO2004022723-A2.

18-MAR-2004.

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Gaps

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100.0%; Score 86; DB 8; Length 125; 100.0%; Pred. No. 3.2e-07; ive 0; Mismatches 0; Indels

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Local Similarity

Query Match Matches

Sequence 125 AA;

16

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17 RQRYLYTDDAQQTEAH 32 1 RORYLYTDDAQOTEAH 16; Conservative

09-SEP-2003; 2003WO-US028141

09-SEP-2002; 2002US-0409145P

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The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, ancrectic, cardiant, hypotensive, antiarteriosclerctic, anorectic, cardiant, hypotensive, antiarteriosclerctic, anorectic, cardiant, hypotensive, anticonvulsant, osteopathic, neuroprofective, antiparkinsonian, anticonvulsant, osteopathic, antiarchritic, antiparkinsonian, anticonvulsant, osteopathic, antiarchritic, antiparkinsonian, anticonvulsant, antiachmatic, and antibodies antiarchritic, antificammatory, dermatological, antiachmatic, and antibodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. C associated with a human disease, preferably a NOVX-associated disorders. C associated with a human disease, preferably a NOVX-associated disorders. C disbertes, obesity, infectious diseases uch as metabolic disorders. C dispertension, arberoclarcial, indections diseases uch as metabolic disorders, helminthic, and protocolars is an electrical, fungal, belinthic, and protocolars is an electrical, fungal, helminthic, and protocolars, ellipseptides and antibodies are used as targets for the identification of small molecules (osteoarthritis), haematopoietic disorders, inflammatory skin disorders, asthma, and various dyslipidaemias. The nucleic acids and polypeptides of the invention of antibodies that bind immunospecifically to NoVX substances for use in therapeutic or disorders, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The NOVX substances for use in therapeutic or disorders, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The NOVX polypeptides of the invention show homology to certain known human protoceinas homology to complement factor I precursor, NOV3 shows homology to complement account of through antiquent believed to the protocolar show homolo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ly-9 precursor; NOV6a-6m show homology to fibroplast growth factor-11 (FGF-21); NOV7a-7c show homology to alpha-2 macroglobulin-like polypeptide variant; NOV6a-8g show homology to antileukoproteinase 1 precursor; NOV9a-91 show homology to LIV-1 protein; NOV10a shows homology to nuclear hormone receptor NNR-1; NOV11a-11j show homology to transmembrane protein-like; NOV12a-12c show homology to beta-necendorphin dynorphin precursor. The present sequence represents a NOVX polypeptide
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The sequence represents a fragment of a fibroblast growth factor-like

(FGF-like) polypeptide. FGF-like protein and its associated mucleic acid

(FGF-like) polypeptide. FGF-like protein and its associated mucleic acid

contains a role in modulating body growth, maturation or life-span. They are

also useful for treating, preventing or ameliorating disorders such as

cirrhosis, inflammatory bowel disease, mucositis, Crohn's disease,

ciabetes, obesity, gastrointestinal abnormalities, neurodegenerative

diseases, damage to renal tubules as a result of acute tubular necrosis,

chaematopoietic cell reconstitution following chemotherapy, wasting

syndromes (e.g., cancer associated cachexia), admage to the corneal

cepithelium, lens or retinal tissue, multiple sclerosis, myopathies, short

cepthelium, lens or retinal tissue, multiple sclerosis, myopathies, short

contains a structuration, alopecia, abnormalities of androgen target organs,

bronchopulmonary dysplasia, acute respiratory distress syndrome, tumours

cof the eye or other tissues, atherosclerosis, hypercholesterolemia,

cof the eye or other tissues, atherosclerosis, hypercholesterolemia,

cof the eye or other tissues, atherosclerosis, cardiac function, immune system dysfunction, cancer, Parkinson's disease,

cardiac function, immune system dysfunction, cancer, Parkinson's disease,

senile dementia, Alzheimer's disease, and decreased cognitive function
neurodegenerative disease; haematopoietic cell reconstitution; cachexia; chemotherapy; corneal epithelium damage; retinal tissue damage; myopathy; multiple sclerosis; short stature; delayed maturation; excessive growth; acromegaly; premature maturation; alopecia; bronchopulmonary dysplasia; androgen target organ abnormality; respiratory distress syndrome; stroke; cancer; atherosclerosis; hypercholesterolaemia; osteoporosis; baldness; osteoarthritis; muscle atrophy; sarcopenia; wrinkles; increased fatigue; decreased stamina; decreased cardiac function; immune system dysfunction; parkinson's disease; Alzheimer's disease; decreased cognitive function;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel isolated fibroblast growth factor-like polypeptide useful for treating, preventing or ameliorating cirrhosis, inflammatory bowel disease, mucositis, Crohn's disease, diabetes, obesity, stroke and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 86; DB 4; Length 181;
Pred. No. 4.9e-07;
Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 14; Page 116-117; 138pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         05-SEP-2000; 2000WO-US024373.
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23-AUG-2000; 2000US-00644052.
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                                                                                                                                                                                                                                     senile dementia; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Liu B;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AMGE-) AMGEN INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Thomason AR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         osteoporosis.
                                                                                                                                                                                                                                                                                          Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fibroblast growth factor-19% polypeptides and polymucleotides useful for diagnosis, prevention, treatment of proliferative, differentiative, tumorigenic disorders such as tumor, psoriasis, rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes the protein and coding sequences of the human fibroblast growth factor (FGF) 19 homologue FGF19X, the former of which is shown here. The sequences can be used in the prognosis and treatment of proliferative diseases such as cancer, restenosis, psoriasis, rheumatoid arthritis and Dupuyrren's contracture, as well as to stimulate cell growth for treating neurological disorders such as
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                                                                                                                                                                                                                                                                                  Human; fibroblast growth factor 19; FGF19X; embryonic development; proliferative disorder; cancer; restenosis; psoriasis; rheumatoid arthritis; Dupuytren's contracture.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Taupier R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 86; DB 4; Length 153; 100.0%; Pred. No. 4e-07; ive 0; Mismatches 0; Indel8
                                                                                                                                                                                                                                     Human fibroblast growth factor 19 homologue FGF19X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fernandes E,
Herrmann JL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Burgess C,
Rastelli L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAU00965 standard; protein; 181 AA.
                                                                                 AAB73069 standard; protein; 153 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 11; Page 7; 97pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-SEP-1999; 99US-0153303P.
03-APR-2000; 2000US-0194246P.
19-JUL-2000; 2000US-00619251.
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                                                                                                                                                                                      (first entry)
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Matches 16; Conservative
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Quinn KE, Spyteck KA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001-218559/22.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-218559/
N-PSDB; AAF76715.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 153 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200118209-A1.
                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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                                                                                                                                                                                      17-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-MAR-2001
                                                                                                                                      AAB73069;
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Gaps

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The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, an anoretic, cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide, antibacterial, fungicide, protozoacide, nootropic, ortucide, antibacterial, fungicide, protozoacide, nootropic, antiarthratic, antihiflammantory, dermatological, antiarthratic, antihiflammantory, dermatological, antiarthratic, antihiflammantory, dermatological, antiarthratic, antihiflammatory, dermatological, antiarthratic, antihiflammatory, dermatological, antiarthratic, antihiflammatory, dermatological, antiarthratic, and antibidases in gene therapy. The polypeptides, nucleic acid molecules and antibodies are useful for associated with a human disease, preferably a NOVX-associated disorder.

The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders, contacted and antibodies are useful for treating, preventing or diagnosing diseases (viral, bacterial, fungal, contacted disorders), contacted disorders, contacted disorders
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                                                                              antiarteriosclerotic; anorectic; vincide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antibackinsonian; anticonvulsant; osteopathic; antiarthritic; antiinflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; FGRA; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; alpha-2 macroglobulin-like polypeptide variant; antileukoproteinase 1 precursor; LTV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acids are further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The NOVX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ort T, Padigaru M, Rieger DK;
                                                           human; antidiabetic; anorectic; cardiant; hypotensive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 54; 214pp; English.
Human NOV6a protein SEQ ID NO:54.
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2002US-0410320P.
2002US-0411060P.
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23-SEP-2002; 2002US-0412825P.
24-SEP-2002; 2002US-0412767P.
25-SEP-2002; 2002US-0413342P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-315567/29.
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polypeptides of the invention show homology to certain known human proteins: NOV1a-1t show homology to fibroblast growth factor receptor 4 (FGFR4); NOV2a shows homology to complement factor I precursor; NOV3a shows show homology to matrix metalloproteinase-15 precursor; NOV4a shows homology to matrix metalloproteinase-15 precursor; NOV4a shows homology to T-lymphocyte surface antigen Ly-9 precursor; NOV6a-6m show homology to fibroblast growth factor-21 (FGF-21); NOV7a-7c show homology to fibroblast growth factor-21 polypeptide variant; NOV8a-8g show homology to antileukoproteinae 1 precursor; NOV9a-91 show homology to LIV-1 protein; NOV10a shows homology to nuclear hormone receptor NOR-1; NOV11a-11j show homology to transmembrane protein-11ke; NOV12a-12c show homology to beta-necendorphin chancements. The present sequence represents a NOVX polypeptide of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; fibroblast growth factor; FGF; zFGF11; chromosome 19; restenosis; proliferation; mesenchymal cell; osteoblastic lineage cell; osteoporosis; chromosomal disorder; chondrosarcoma; atherosclerosis; obseity; fracture; bone formation; diabetes mellitus; neural cell development; angiogenesis; amyotrophic lateral sclerosis; cerebrovascular stroke; neuropathy; ulcer; congenital disorder; wound healing; cardiac function; glomerulonephritis; surfactant production; anorecitc; ischaemia; neogenesis; hypertension; cytostatic; vasotropic; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel zFGF11 polypeptide and polynucleotide, a member of fibroblast growth factor family, for stimulating proliferation of mesenchymal, osteoblastic lineage cells and treating diabetes, obesity, osteoporosis,
                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human fibroblast growth factor (FGF) homologue, zFGF11 protein.
                                                                                                                                                                                                                                                                                      100.0%; Score 86; DB 8; Length 183; 100.0%; Pred. No. 5e-07;
                                                                                                                                                                                                                                                                                                                         0; Indels
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                                                                                                                                                                                                                                                                                                     100.0%; Prec. .v.
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/label=_Signal_peptide
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                                                                                                                                                                                                                                                                                                                                                                                 17 RORYLYTDDAQQTEAH
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                                                                                                                                                                                                                                                                                                                                                             1 RORYLYTDDAQQTEAH
                                                                                                                                                                                                                                                                                                                           16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conklin DC, Chen Z;
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                                                                                                                                                                                                                                                                                                         Local Similarity
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                                                                                                                                                                                                                                                        Sequence 183 AA;
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2000US-00747259
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                                                                                                                                                                                                                                                                                     Desnoyers L,
C, Gurney AL,
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                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC
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les 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                            or liver tumor.
                                                                                                                                 20-DEC-2000;
28-FEB-2001;
01-MAR-2001;
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                                                                                                                                                                                                           10-MAY-2001;
                                                                      10-NOV-2000;
28-NOV-2000;
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                                        23-AUG-2000;
24-AUG-2000;
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                                                                                                                                                                                                                                                                                      Baker KP,
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Matches
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                                                  The present sequence is human intropused growth ractor.

ZFGF11 protein. ZFGF11 game is located on chromosome 19. ZFGF11 is useful for stimulating proliferation of mesenchymal cells, osteoblastic lineage cells. ZFGF11 is useful for identifying chromosomal disorders associated with abnormal expression of ZFGF11 protein. ZFGF11 is also useful for stimulation, inhibition or proliferation of myocytes, smooth muscle cells addipocytes, choracytes, neural tube-derived stem cells, prostate-cells and neuronal progenitors, pancreatic cells, fractures, certherocals, restencais and obseity. Stimulation of osteoblasts cresults in bone formation useful for treating bone defects, fractures, ceteporosis and other deficiencies in bone structure and formation.

CC STGF11 is useful for treating disorders associated with diabette containing, neural cell development or degeneration, amyotrophic lateral sclerosis, cerebrovascular stroke, neuropathy associated with lack of maintenance of neuronal development, promoting angiogenesis and wound healing, for revascularisation in eye, complications related to poor circulation such as diabetic food ulcers, improving cardiac ceduce damage to the tissue caused by ischaemia or ischaemia-reperfusion cevents, particularly in the heart or brain and for inducing skeletal cevents, particularly in the heart or brain and for inducing skeletal cereating of systemic and pulmonary hypertension. Antagonists of zFGF11 cere inhibiting disorders associated with kidney epithelium
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                                            homologue,
11 is useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; secreted protein; PRO; tumour; lung cancer; colon cancer;
breatc cancer; prostate tumour; rectal tumour; liver tumour;
pericyte call proliferation; chondrocyte cell proliferation;
tumour necrosis factor-alpha.
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                                          growth factor (FGF)
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                                          present sequence is human fibroblast
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              Claim 1; Page 63; 69pp; English
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25-JUL-2000; 2000US-0220624P.
25-JUL-2000; 2000US-0220664P.
25-JUL-2000; 2000US-0220664P.
25-JUL-2000; 2000US-0220666P.
26-JUL-2000; 2000US-0220666P.
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                                                                                                                                                                                                                                                                                                                                                                                                                            such as glomerulonephritis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.
Best Local Similarity 100.
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 208 AA;
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25-JUL-2000;
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XXX6666666666666666666666666666668X
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The invention relates to one hundred and twenty two nucleic acids encoding PRO polypeptides. The sequences of the 122 PRO polymucleotides encode human secreted proteins. The PRO nucleic acids, polypeptides, agonists and antagonists are useful for treating a PRO related disorder. The PRO polypeptides are useful for diagnosing tumours, especially lung cancer, colon cancer, breast tumour, prostate tumour, rectal tumour or liver tumour. The PRO polypeptides are useful for stimulating the proliferation of, or gene expression, in pericyte cells, for stimulating the release of tumour necrosis factor-alpha from human blood, is timulating the release of tumour necrosis factor-alpha from human blood, for stimulating the proliferation of normal human dermal fibroblast cells. The PRO polypeptide may also be used as molecular weight markers and for tissue typing. The PRO nucleic acids have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. AAU83592-AAU83713 represent human PRO protein sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         One hundred and twenty two nucleic acids encoding PRO polypeptides, useful for treating a PRO related disorder and for diagnosing tumors such as lung cancer, colon cancer, breast tumor, prostate tumor, rectal tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; fibroblast growth factor; FGF; zFGF11; mesenchymal cell; FGFRIIIc; osteoblastic lineage cell; diabetes mellitus; neuropathy; neural cell development; amyotrophic lateral sclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Goddard A, Godowski PJ;
phan JF, Watanabe CK, Wood WI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gerritsen ME, Goddard P
Smith V, Stephan JF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABG32358 standard; protein; 208 AA.
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                                                                                                                                                                                                                                                                                                             2001US-00816744.
2001US-00854208.
2001US-00854280.
                                                                     2000WO-US030873.
2000US-0253646P.
2000WO-US032678.
2000WO-US023522.
2000WO-US023328.
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Homo sapiens
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AC ABUE
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DT 23-,
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    28. .208
    /note= "Mature fibroblast growth factor homologue,
zFGF11. This sequence is specifically claimed in claim 4"

                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated human polypeptide (1) for zPGF11 (a fibroblast growth factor), and the encoding polymucleotide (11). (1) and (11) are used in methods of the invention stimulating proliferation of mesenchymal cells, detecting the presence of zPGF11 in a biological sample, detecting the presence of FGFRIIC in a biological sample and estimulating proliferation of osteoblastic lineage cells. The polypeptides, nucleic acid and/or antibodies of the invention may be used in treatment of disorders associated with diabetes mellitus, neural cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         development or degeneration, amyotrophic lateral sclerosis, cerebrovascular stroke, neuropathy associated with lack of maintenance of neuronal differentiation, and congenital disorders of the nervous system or lack of neuronal development. Molecules of the invention may also be useful for improving cardiac function and for promoting wound healing of the epidermis. The present sequence represents the amino acid sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; extracellular messenger; neurological disorder; epilepsy; XMES-3;
congenital disorder;
                                                                                                                                                                                                                                                                                                                              Isolated polypeptide for zFGF11 (fibroblast growth factor) useful in treatment of disorders associated with diabetes mellitus, neural cell development or degeneration, amyotrophic lateral sclerosis,
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cerebrovascular stroke; neuronal differentiation; congen:
nervous system disorder; cardiac function; wound healing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human extracellular messenger (XMES)-3 protein.
                                                                     1. .27
/label= Signal_sequence
                                                         Location/Qualifiers
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                                                                                                                                                                                      05-JAN-2001; 2001US-00755695
                                                                                                                                                                                                              05-JAN-2000; 2000US-0174526P
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Best Local Similarity 100.
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                    cerebrovascular stroke.
                                                                                                                                                                                                                                                                                            WPI; 2002-626540/67.
N-PSDB; ABK91310.
                                                                                                                                                                                                                                                                       Chen Z;
                                                                                                                                                                                                                                    (CONK/) CONKLIN D C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 208 AA;
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                                                                                                                                                                                                                                                CHEN Z.
                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human zFGF11
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                                                                                                                                                               27-JUN-2002
                                                                                                                                                                                                                                                                      Conklin DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB17601;
                                                                   Peptide
                                                                                           Protein
                                                                                                                                                                                                                                                CHEN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
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The present invention relates to new extracellular messenger polypeptides and polynucleotides encoding them. XMES is useful in the diagnosis, treatment and prevention of neurological disorders (e.g. epilepsy, stroke, or Alzheimer's disease), autoimmune/inflammatory disorders (e.g. epilepsy, cardined immune deficiency syndrome, AIDS, Addison's disease, or allergies), developmental disorders (e.g. renal tubular acidosis, anaemia or Cushing's syndrome), endocrine disorders (e.g. hypophysectomy, ancurysm or vascular malformation), and cell proliferative disorders (e.g. cancer), and in the assessment of the effects of exogenous or compounds on the expression of nucleic acid and amino acid sequences of extracellular messengers. XMES may also be used in the treatment of viral, bacterial, fungal, parasitic, protozoal and helminthic infections, trauma, disorders associated with hypopituitarism, hyperthyroidism or gonadal steroid hormones, and pancreatic disorders such as type II diabetes mallitus. The XMES may be used for somatic or germline gene therapy. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
Alzheimer's disease; autoimmune disorder; renal tubular acidosis; stroke; acquired immune deficiency syndrome; AIDS; Addison's disease; cytostatic; developmental disorder; anaemia; Cushing's syndrome; endocrine disorder; vascular malformation; cell proliferative disorder; gene therapy; cancer; neuroprotective; trauma; hypopituitarism; hypothyroidism; antihelminthic; hyperthyroidism; gonadal steroid hormone; pancreatic disorder; nootropic; diabetes mellitus; immunosuppressive; anti-inflammatory; antibacterial; antiviral; antifungal; parasitic; protozoal; allergy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Yue H, He A, Nguyen DB, Walia N, Gandhi AR, Azimzai Y;
O, Tang YT, Lu Y, Baughn MR, Duggan BM, Lee S, Hafalia A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New extracellular messenger polypeptides and polynucleotides encoding them, useful for diagnosing, treating or preventing e.g. neurological autoimmune, inflammatory, developmental and endocrine disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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23-JUN-2000; 2000US-0213465P.
14-NOV-2000; 2000US-0249019P.
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Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI;

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New genes, and its encoded secreted and transmembrane polypeptides, useful for stimulating Tumor Necrosis Factor alpha, or chondrocyte or pericyte proliferation, especially for treating lung tumors, arthritis or wounds in a mammal.
                                                                                                                                                                                                                                                                                                                                    Claim 11; Fig 78; 314pp; English.
                                                                             12-AUG-2002; 2002US-00218631.
                                                                                                                    29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
                                                                                                       01-JUN-2001; 2001WO-US017800
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C, Gurney AL,
                                                                                                                                                          (GETH ) GENENTECH INC
                                                                                                                                                                                                                            WPI; 2003-512315/48.
N-PSDB; ACD68631.
                         JS2003045687-A1
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Grimaldi JC,
Homo sapiens
                                                   06-MAR-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to the isolation of novel human PRO polypeptides, and the polynuclectide sequences encoding them. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides and polynuclectides are useful for preparing a medicament useful in the diagnosis and treatment of tumours. Anti-PRO antibodies are useful in diagnostic assays for PRO, by detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. ABUS0739-ABUS0860 from represent the human PRO polypeptides of the invention. Note: The sequence data for this patent was obtained in electronic format directly from the USPTO web site at seqdata.uspto.gov/psipsplDEDILTY.html
                       Human; PRO polypeptide; secreted and transmembrane protein; anti-PRO antibody; diagnostic assay; gene expression; tumour; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; secreted and transmembrane protein; PRO; cytostatic; antiarthritic; osteopathic; gene therapy; TNF-Agonist-Alpha; chondrocyte stimulator; pericyte stimulator; fibroblast modulator; pharmaceutical; diagnostic; biosensor; bioreactor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; liver tumour; bone disorder; cartilage disorder; sports injury; arthritis; wound.
                                                                                                                                                                                                                                                                     Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephan JF, Watanabe CK, Wood WI;
                                                                                                                                                                                                                                                                                                                                                One hundred and twenty two nucleic acids encoding PRO polypeptides, useful for the manufacture of a medicament for diagnosing or treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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01-JUN-2001; 2001WO-US017800.
29-JUN-2001; 2001WO-US021066.
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                                                                                                                                                                                                                 09-APR-2002; 2002US-00119480
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Best Local Similarity 100.
Human PRO polypeptide #39
                                                                                                                                                                                                                                                                      Desnoyers L,
C, Gurney AL,
                                                                                                                                                                                                                                           (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                            WPI; 2003-342045/32
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                                                                                           US2003036635-A1.
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                                                                 ношо варіепв
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                                                                                                                                                                                                                                                                      Baker KP,
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                                                                                                                                                                                                                                                                                                                                                                                 tumor.
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The invention describes an isolated nucleic acid molecule comprising a sequence with at least 80% identity to: (a) a nucleotide encoding any of 122 PRO (secreted and transmembrane) polypeptides whose sequences are fully defined in the specification; or (b) any of 122 nucleotide control or (b) any of 122 nucleotide sequences having e.g. 4834, 2504 or 1759 bp fully defined in the specification; or the full length coding sequence of any these 122 nucleotide sequences. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These are particularly useful for detecting tumour, rectal tumour, colon tumour, breast tumour, prostate tumour, rectal tumour, or liver tumour) in a mammal, for stimulating the release of TMR-alpha from human blood, for stimulating the proliferation or differentiation of chondrocyte (cells, for stimulating proliferation or differentiation of chondrocyte cells, for stimulating proliferation or differentiation of chondrocyte (cells, for stimulating proliferation or differentiation of chondrocyte (colls, for stimulating proliferation or differentiation) or various bone and/or cartilage disorders (e.g. sports injuries or arthritis), or wounds. The PRO polypeptides are useful in drug screening, particularly as targets of the therapeutic intervention in these diseases. The PRO polypeptides are useful as molecular weight markers, or for chromosome contenting libraries of human cDNA, genomic DNA or mRNA. The PRO genes may also be useful in gene therapy, particularly for replacing a defective contents and propertice of a novel human secreted and the transmembrane PRO polypeptide sequence of a novel human secreted and and contents and propertices of a novel human secreted and and contents and not and sequence of a novel human secreted and and contents and not and sequence of a novel human secreted and and contents and not and sequence of a novel human secreted and and contents and not and the propertices.
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100.0%; Pred. No. 5.7e-07;
tive 0; Mismatches 0;
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Matches 16; Conservative
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type 1 diabetes.

WO2003011213-A2. Homo sapiens.

13-FEB-2003.

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                              antiangiogenic; hypotensive; vulnenry; antiarteriosclerotic; gene therapy; cardiovascular disorder; endothelial disorder; andiogenic disorder; cardiac hyportrophy; trauma; cancer; andiogenic disorder; cardiac hyportration; atherosclerosis; hypertension; arterial restenosis; rheumatoid arthritis; angina; myocardial infarction; thrombophlebitis; lymphangitis; tumour angiogenesis; breast carcinoma; liver carcinoma; wound healing; chromosome mapping; gene mapping.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention describes one hundred and eighty seven nucleic acids encoding novel human secreted and transmembrane (PRO) polypeptides. The PRO nucleic acids, polypeptides, agonists and antagonists are useful for treating or diagnosing a cardiovaccular, endothelial or anglogenic disorder in a mammal, e.g. cardiac hypertrophy, trauma, cancer, agerelated macular degeneration, atheroselerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour anglogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The PRO nucleic acids have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephan JF, Watanabe CK, Wood WI;
                   cardiant; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal.
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                 secreted and transmembrane protein;
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29-JUN-2001; 2001WO-US021066.
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Grimaldi JC, Gurney AL,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-393229/37.
N-PSDB; ACA68535.
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Best Local Similarity
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                                                                                                                                                                                Homo sapiens.
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Human, fibroblast growth factor 21; FGF-21; chromosome 19; 19q13.1-qter; diabetes; obesity; antidiabetic; anorectic; type 2 diabetes;

Human fibroblast growth factor 21 protein SEQ ID NO:2.

(first entry)

12-MAY-2003

ABP96156;

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The present sequence represents human fibroblast growth factor 21 (FGF-21). FGF-21 is located to chromosome 19, more specifically to 19q13.1-qter. The present invention describes a method for treating a mammal exhibiting type 2 diabetes or type 1 diabetes, or treating a mammal cooksity which comprises administering to the mammal a composition cooksity which comprises given in ABP96156. Also described: (1) inducing an increase in glucose uptake in adipocyte cells by administering FGF-21 to induce an increase in glucose uptake; and (2) administering medicament for treating type 1 diabetes, type 2 diabetes or obesity in a mammal using FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity for treating a mammal for obesity. The method is preferably useful for treating humans exhibiting type 1 or type 2 diabetes, and for treating domestic animals for obesity.
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nes 16; Conservative
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ne: 21.9333 secs
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Job time :
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Treating a mammal exhibiting Type 2 diabetes or Type 1 diabetes or obesity, by administering composition comprising fibroblast growth factor

Claim 3; Fig 1; 32pp; English.

Shiyanova TL;

Glasebrook AL, Hammond LJ, Kharitonenkov A,

WPI; 2003-248106/24. N-PSDB; ABZ79797.

(BLIL ) LILLY & CO BLI

22-JUL-2002; 2002WO-US021290. 30-JUL-2001; 2001US-0308702P. 10-JAN-2002; 2002US-0347991P.

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NAME/KEY: SIGNAL
LOCATION: -28..-1
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Best Local
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14225, A
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1470, Ap
4224, Ap
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14221, A
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/cgm2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgm2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgm2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgm2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd
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S-09-489-098A-14225
S-09-107-522A-4355
S-09-171-461-28
S-09-270-711-28
S-09-248-796A-26424
S-09-252-991A-28391
S-09-538-092-581
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-09-710-279-1396
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US-09-134-001C-5569
US-09-830-433A-20
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-09-471-276-1470
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US-09-715-805-2
US-09-489-039A-1
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Match Length DB
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g 6926, 'Ap	ednence	02-03-243-681A-6926	7"	64	?	T	'n	r C
- •	Sequence	US-09-538-092-320	4	415	9.0	43	37	44
	Sequence	US-09-252-991A-29728	4	400	3.0	43	37	43
3 28, Appl	Sequence	US-09-352-990-28	m	377	43.0	43	37	42
42579, A	Seguence	US-09-270-767-42579	4	349	43.0	43	37	41
5499, Ap	Sequence	US-09-543-681A-5499	4	338	0	43	37	40
3 2086, Ap	Sequence	US-09-540-236-2086	4	318	43.0	43	37	39
3 3993, Ap	Sequence	US-09-134-001C-3993	ო	317	0	43	37	38
e 31483, A	Sequence	US-09-252-991A-31483	4	310	0	43	37	37
220	Sequence	US-09-710-279-2206	4	219	43.0	43	37	36
7	Sequence	US-10-226-065-2	4	2396	~	44	38	35
2, Appli	Sequence	US-09-565-864-2	4	2396	7	44	38	34
7	Sequence	US-08-747-863-2	m	2396.	~	44	38	33
2,2	Sequence	US-08-157-005-2	ч	2396	7	44	38	32
15,	Sequence	US-08-089-397A-15	m	776	~	44	38	31
20,	Seguence	US-07-603-133B-20	Н	176	7	4	38	30
3 17, Appl	Sequence	US-07-603-133B-17	Н	776	7	4	38	. 59
16,	Sequence	US-08-089-397A-16	m	747	7	44	38	28
16,	Sequence	US-08-089-397A-16 US-07-603-133B-17	пН	747	77	4 4	38	

#### ALIGNMENTS

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Pred. No. 3.1e-08;
; Mismatches 0; Indels
                                                           APPLICANT: Itch, No. 6716626uyuki
APPLICANT: Kavanaugh, W. Michael
TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS
FILE REPERENCE: PP-16758.001/201130.408
CURRENT APPLICATION NUMBER: US/09/715,805
CURRENT PILING DATE: 2000-11-16
NUMBER: OF SEQ ID NOS: 17
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                   100.0%; Scu
100.0%; Pre
Sequence 7, Application US/09715805
Patent No. 6716626
GENERAL INPORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                            16; Conservative
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; ORGANISM: Homo sapiens
US-09-715-805-7
                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
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Gaps

APPLICANT: Unmas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Jobert, S.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION UNMERR: US/09/621,976
CURRENT FILIG DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 5213
LENGTH: 85 RESULT 2
US-09-621-976-5213
Sequence 5213, Application US/09621976
Parent No. 6639063
GENERAL INFORMATION: 1 RORYLYTDDAQQTEAH 16

TYPE: PRT ORGANISM: Homo sapiens

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LENGIH: 181
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US-09-390-207-6
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; Sequence 5, Application US/09390207
; Patent No. 6504530
; GENERAL INFORMATION:
    APPLICANT Liu, Benxian
; APPLICANT Liu, Benxian
; TITLE OF INVENTION: Fibroblast Growth Factor-Like Polypeptides
; FILER REPERENCE: 99-371
; CURRENT APPLICATION NUMBER: US/09/390,207
; CURRENT FILING DATE: 1999-09-07
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LEMGTH: 181
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APPLICANT: Liu, Benxian
TITLE OF INVENTION: Fibroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 99-371
CURRENT APPLICATION NUMBER: US/09/390,207
CURRENT FILING DATE: 1999-09-07
NUMBER OF SEQ ID NOS: 41
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 209
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100.0%; Score 86; DB 4; Length 209;
Best Local Similarity 100.0%; Pred. No. 4.9e-07;
Matches 16; Conservative 0; Mismatches 0; Indels
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Best Local Similarity 100.0%; Pred. No. 4.2e-07;
Matches 16; Conservative 0; Mismatches 0;
                                                                                                                                                                 Query Match
100.0%; Score 86; DB 4; 1
Best Local Similarity 100.0%; Pred. No. 1.9e-07;
Matches 16; Conservative 0; Mismatches 0;
; NAME/KEY: UNSURE
; LOCATION: 57
; OTHER INFORMATION: Xaa = Ala, Pro
; NAME/KEY: UNSURE
; LOCATION: 52
; OTHER INFORMATION: Xaa = Leu, Val
US-09-621-976-5213
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                                                                                                                                                                                                                                                                        45 RORYLYTDDAQQTEAH 60
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CORGANISM: Homo sapiens
US-09-390-207-5
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CRGANISM: Homo sapiens
US-09-390-207-2
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45 RORYLYTDDAQQTEAH 60

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Sequence 4, Application US/09390207
Setent No. 6504530
GENERAL INFORMATION:
APPLICANT: Thomason, Arlen
TITLE OF INVENTION: Fibroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 99-371
CURRENT APPLICATION NUMBER: US/09/390,207
CURRENT FILING DATE: 1999-09-07
NUMBER OF SEQ ID NOS: 41
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 4
LENGTH: 210
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Patent No. 6504530
GERREAL INFORMATION:
APPLICANT: Thomason, Arlen
APPLICANT: Liu, Benxian
TITLE OF INVENTION: Fibroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 99-371
CURRENT APPLICATION NUMBER: US/09/390,207
CURRENT FILING DATE: 1999-09-07
NUMBER OF SEQ ID NOS: 41
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 6
                                               GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Itoh, No. 6716626uyuki
APPLICANT: Itoh, No. 6716626uyuki
TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS
FILE REFERENCE: PP-1678.001/201130.408
CURRENT APPLICATION NUMBER: 20/9/715,805
CURRENT FILING DATE: 2000-11-16
NUMBER OF SEQ ID NOS: 17
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
LENGTH: 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 86; DB 4; Length 209; Best Local Similarity 100.0%; Pred. No. 4.9e-07; Matches 16; Conservative 0; Mismatches 0; Indels
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Sequence 4, Application US/09715805; Patent No. 6716626
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                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
; ORGANISM: Mus musculus
US-09-390-207-6
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APPLICANT: Lynn A Doucette-Stamm and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 28, Application US/09171461

Patent No. 6335016

GENERAL INFORMATION

APPLICANT: Baker, Adam

APPLICANT: Cotten, Matthew

APPLICANT: Schaffner, Gotthold

TILE OF INVENTION: Chicken Embryo Lethal Orphan (CELO) Virus

FILE REFERENCE: 0652.1800000

CURRENT APPLICATION NUMBER: US/09/171,461

CURRENT APPLICATION NUMBER: PCT/EP97/01944

EARLIER FILING DATE: 1997-04-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 42; DB 4; Length 137;
Pred. No. 9.6;
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                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: GENOME THERAPEUTICS CORPORATION
STREET: 100 Beaver Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/085,598
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: July 2, 1997
ATTORNEY AGENT INPORMATION:
NAWE: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
REGISTRATION NUMBER: GTC-012
TELECOMMUNICATION INFORMATION:
TELEPHONE: (781) 893-5007
                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4; Mismatches
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LOCATION: (B) LŌCATION 1...137
SEQUENCE DESCRIPTION: SEQ ID NO: 4355:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGINAL SOURCE:
ORGANISM: Enterococcus faecium
                                                                                                                                                                                                                                                                                   ZIP: 02354
COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
                                                                                                                                                                                                                                                                                                                                                             COMPUTER: PC
OPERATING SYSTEM: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 137 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (781)893-8277
INFORMATION FOR SEQ ID NO: 4355:
SEQUENCE CHARACTERISTICS:
                                                                                                                        NUMBER OF SEQUENCES: 7310
                                                                                                                                                                                                                                         STATE: Massachusetts
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108 XIYTDESDETE 118
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    Patent No. 6583275
GENERAL INFORMATION:
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Patent No. 6610836
GENERAL INFORMATION:
APPLICANT: Gary Exeton et. al
APPLICANT: Gary Exeton et. al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
TITLE OF INVENTION: PREUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERENCE: 2709.2004001
CURRENT APPLICATION NUMBER: US/09/489,039A
CURRENT FILING DATE: 2000-01-27
PRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 14342
SEQ ID NO 14225
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                                                                       Query Match
87.2%; Score 75; DB 4; Length 210;
Best Local Similarity 87.5%; Pred. No. 3.7e-05;
Matches 14; Conservative 0; Mismatches 2; Indels
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Best Local Similarity 87.5%; Pred. No. 3.7e-05;
Matches 14; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Itch, No. 6716626uyuki
APPLICANT: Itch, No. 6716626uyuki
APPLICANT: Kavanaugh, W. Michael
TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
FILE REPERENCE: PP-16758.001/201130.408
CURRENT APPLICATION NUMBER: U$/09/715,805
CURRENT PILING DATE: 2000-11-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PastSEQ for Windows Version 4.0 SEQ ID NO 2 LENGTH: 210 TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 48;
Pred. No.
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US-09-107-532A-4355
; Sequence 4355, Application US/09107532A
                                                                                                                                                                                                                                                                                                                                  Sequence 2, Application US/09715805 Patent No. 6716626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Klebsiella pneumoniae US-09-489-039A-14225
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Best Local Similarity 62.5%;
Matches 10; Conservative
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; ORGANISM: Mus musculus
US-09-390-207-4
                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
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GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: AREUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT PAPLICATION NUMBER: US/09/252,991A
CURRENT PILING DATE: 1999-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 28391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Gary Breton et. al
APPLICANT: GARY Breton et. al
TITIE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
TITIE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.2004001
CURRENT APPLICATION NUMBER: US/09/489,039A
CURRENT FILING DATE: 2000-01-27
FRICH APPLICATION NUMBER: US 60/117,747
PRIOR FILING DATE: 1999-01-29
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                                                                                                      Length 102;
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                                                                                                                                                 Indels
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                                                                                                        Score 40; DB 4;
Pred. No. 15;
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                                                                                                                                               5; Mismatches
                                                                                                                                                                                                                                                                                      RESULT 14
US-09-252-991A-28391
; Sequence 28391, Application US/09252991A
nitent No. 6551795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 10181, Application US/09489039A Patent No. 6610836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Klebsiella pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             46.5%;
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                                                                                                      Query Match
Best Local Similarity 37.5%;
Matches 6; Conservative
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SEQ ID NO 10181
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                     TYPE: PRT
Candida albicans
US-09-248-796A-26424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 63.6
Matches 7; Conservative
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Matches 7; Conservative
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129 WRDDAPQTESH 139
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TITLE OF INVENTION: WOLEEC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN TITLE OF INVENTION: POR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: VOWBER: US/09/248,796A

CURRENT REPERIOR: 1999-02-13

PRIOR PELLING DATE: 1999-02-13

PRIOR PELLING DATE: 1998-02-13

PRIOR PELLING DATE: 1998-08-13

NUMBER OF SEQ ID NOS: 28208
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| Sequence 28, Application US/09970711
| Fatent No. 6773709
| GENERAL INFORMATION:
| APPLICANT: Baker, Adam
| APPLICANT: Cotten, Matthew
| APPLICANT: Cotten, Matthew
| APPLICANT: Cotten, Robert
| APPLICANT: Schaffner, Gotthold
| TITLE OF INVENTION: Chicken Embryo Lethal Orphan (CELO) Virus
| FILE REFERENCE: 0552.1800001
| CURRENT FILING DATE: 12001-10-05
| PRIOR APPLICATION NUMBER: 09/171,461
| PRIOR APPLICATION NUMBER: PGT/EP97/01944
| NUMBER OF SEQ ID NOS: 54
| NUMBER OF SEQ ID NOS: 54
| SOFTWARE: PatentIn Ver. 2.0
| SEQ ID NO 28
| LENGTH: 1121
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Pred. No. 1.4e+02;
                                                                                                                                                                                                            47.7%; Score 41; DB 3; Length 1121; 50.0%; Pred. No. 1.4e+02;
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US-09-970-711-28
                                                                                                                                             ; OTHER INFORMATION: Position: 6501..9866/Product: E2b pol
US-09-171-461-28
                                                                                                                                                                                                                                                   3; Mismatches
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731 RQQFRYADDPEQEE 744
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NUMBER OF SEQ ID NOS: 54
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 28
LENGTH: 1121
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Best Local Similarity 50.0%
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Matches 7; Conservative
                                                                                  TYPE: PRT
ORGANISM: CELO VIRUS
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ORGANISM: CELO VIRUS
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US-09-248-796A-26424
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US-09-970-711-28
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                                                                                                                              FEATURE:
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Search completed: July 8, 2005, 22:22:33 Job time : 6.4 secs

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Maximum Match 1008
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US-10-218-873-78
US-10-227-873-78
US-10-227-873-78
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US-10-227-873-78
US-10-227-873-78
US-10-2319-464-78
US-10-2319-466-78
US-10-2319-468-78
US-10-2319-478-78
US-10-2319-478-78
US-10-2319-478-78
US-10-2319-524-78
US-10-227-881-78
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## ALIGNMENTS

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Sequence 7, Application US/10060765
; Publication No. US20020164713A1
; GENERAL INPORMATION:
; APPLICANT: Itoh, No. US20020164713Aluyuki
; APPLICANT: Itoh, No. US20020164713Aluyuki
; TITLE OF INVENTION: HUMAN FEF-21 GENE AND GENE EXPRESSION
; TITLE OF INVENTION: HUMAN FEF-21 GENE AND GENE EXPRESSION
; TITLE OF INVENTION: HUMAN FEF-21 GENE AND GENE EXPRESSION
; FILE REFERENCE: PP-16758.001/201130.408
; CURRENT APPLICATION NUMBER: US/10/060,765
; CURRENT FILING DATE: 2002-01-29
; PRIOR APPLICATION NUMBER: US/09/715,805
; NUMBER OF SEQ ID NOS: 17
; SORTHARE: PSECSED FOR Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0%; Score 86; DB 13; Length 16;
0%; Pred. No. 1e-07;
0; Mismatches 0; Indels
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Best Local Similarity 100.
Matches 16; Conservative
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US-10-060-765-7
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RESULT 2 US-10-818-140-7 ; Sequence 7, Application US/10818140

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PRIOR APPLICATION NUMBER: 60/296,404
PRIOR FILING DATE: 2001-06-06
PRIOR PLING DATE: 2001-06-06
PRIOR PLING DATE: 2001-06-06
PRIOR PLING DATE: 2001-06-10
PRIOR PLING DATE: 2001-06-11
PRIOR PLING DATE: 2001-06-11
PRIOR PLING DATE: 2001-06-12
PRIOR PLING DATE: 2001-06-14
PRIOR PLING DATE: 2001-06-14
PRIOR PLING DATE: 2001-06-14
PRIOR PLING DATE: 2001-06-15
PRIOR PLING DATE: 2001-06-15
PRIOR PLING DATE: 2001-06-15
PRIOR PLING DATE: 2001-06-15
PRIOR PLING DATE: 2001-06-26
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; Sequence 52, Application US/10659004
; Publication No. US20050048507A1
; GENERAL INFORMATION:
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US-10-659-004-60
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US-10-659-004-52
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Publication No. US20050048507A1

GENERAL INFORMATION:

APPLICANT: Zhong et al.

TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOD FILE REFERENCE: 21402-608

CURRENT PAPLICATION NUMBER: US/10/659,004

CURRENT FILING DATE: 2003-09-09

PRIOR APPLICATION NUMBER: 60/295,607

PRIOR APPLICATION NUMBER: 60/295,661

PRIOR APPLICATION NUMBER: 60/295,661
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## Sequence 7, Application US/10771173

## Publication Wo. US20050037457A1

## CENERAL INFORMATION:

## APPLICANT: Itoh, Nobuyuki

## APPLICANT: Kavanaugh, W. Michael

## TITLE OF INVENTION: PRODUCTS

## TITLE OF INVENTION: PRODUCTS

## CURRENT APPLICATION NUMBER: US/10/771,173

## CURRENT FILING DATE: 2004-02-03

## PRIOR PILING DATE: 2000-11-16
                                   GENERAL INFORMATION:
APPLICANT: Itch, Nobuyuki
APPLICANT: Itch, Nobuyuki
APPLICANT: Kavanaugh, W. Michael
ITILE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
ITILE OF INVENTION: HUMAN FGF-31
FILE REFRENCE: PP-16758.001/201130.408
CURRENT APPLICATION NUMBER: US/10/818,140
CURRENT PILING DATE: 2004-04-05
PRIOR FILING DATE: 2000-11-16
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PSECSEQ for Windows Version 4.0
SEQ ID NO : SEQ ID NO : LENGTH: 16
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7
LENGTH: 16
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               Publication No. US20040185494A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-771-173-7
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; ORGANISM: Homo sapiens
US-10-818-140-7
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Query Match
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US-09-755-695-2
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Publication No. US20030181379A1
GENERAL INFORMATION:
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: WHITE, Kenneth
APPLICANT: WHITE, Kenneth
APPLICANT: WHITE, Kenneth
APPLICANT: WINVERN, Thomas
TITLE OF INVENTION: NOVEL FIBROBLAST GROWTH FACTOR (FGF23) AND METHODS FOR USE
TITLE OF INVENTION: NOVEL FIBROBLAST GROWTH FACTOR (FGF23) AND METHODS FOR USE
CURRENT FILING DATE: 2003-03-04
CURRENT FILING DATE: 2001-07-10
PRIOR PILING DATE: 2001-07-10
PRIOR PILING DATE: 2001-07-19
PRIOR FILING DATE: 2001-07-19
PRIOR FILING DATE: 2001-07-19
                                                                                                                                                                                                                                                                                   APPLICANT: ECONS, Michael
APPLICANT: WHITE, Kenneth
APPLICANT: STROM, Tim
APPLICANT: MEITHEN, Thomas
TITLE OF INVENTION: NOVEL FIBROBLAST GROWTH FACTOR (FGF23) AND METHODS FOR USE
FILE REFERENCE: 053884-5001
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Pred. No. 1.1e-06;
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Query Match
Best Local Similarity 100.0%; Pred. No. 9.8e-07;
Matches 16; Conservative 0; Mismatches 0;
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CURRENT FILING DATE: 2001-07-10
PRIOR PILING DATE: 2000-07-19
NUMBER OF SEQ ID NOS: 34
SOFTWARE: PATENT VEXELON 3.0
SEQ ID NO 33
LENGTH: 136
                                                                                                                                                                                                                         Sequence 33, Application US/09901938
Patent No. US20020156001A1
GENERAL INFORMATION:
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SOFTWARE: Patentin version 3.0
SEQ ID NO 33
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                                                                                                                           17 RORYLYTDDAQQTEAH 32
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Best Local Similarity 100.
Matches 16; Conservative
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US-09-901-938-33
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ORGANISM: Homo Sapiens
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APPLICANT: Zhong et al.

TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOD

FILE REFERENCE: 21402-608

CURRENT PELING DATE: 2003-09-09

PRIOR PELICATION NUMBER: 06/295,607

PRIOR PELICATION NUMBER: 60/295,601

PRIOR PELICATION NUMBER: 60/295,601

PRIOR PELING DATE: 2001-06-04

PRIOR PELING DATE: 2001-06-04

PRIOR PELING DATE: 2001-06-06

PRIOR PELING DATE: 2001-06-06

PRIOR PELING DATE: 2001-06-06

PRIOR PELING DATE: 2001-06-06

PRIOR PELING DATE: 2001-06-11

PRIOR PELING DATE: 2001-06-12

PRIOR PELING DATE: 2001-06-15

PRIOR PELING DATE: 2001-06-15
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Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 187
SOFTWARE: CuraSeqList version 0.1
SEQ ID NO 54
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Fatent No. US20020081663A1
GRARRAL INPORMATION:
APPLICANT: CORNIIN, Darrell C.
APPLICANT: Chen, Zhi
TITLE OF INVENTION: NOVEL FGF HOMOLOG ZFGF11
FILE REFERENCE: 00-03
CURRENT APPLICATION NUMBER: US/09/755,695
CURRENT FILING DATE: 2001-05-11
FRIOR APPLICATION NUMBER: US 60/174,526
FRIOR RILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 6
SOFTWARE FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 208
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Sequence 54, Application US/10659004 Publication No. US20050048507A1 GENERAL INFORMATION:
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-659-004-54
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ORGANISM: Homo sapiens
US-09-755-695-2
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Best Local Similarity
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R FILING DATE: 1998-09-24

R APELICATION NUMBER: 60/101922

R FILING DATE: 1998-09-24

R APELICATION NUMBER: 60/106178

R FILING DATE: 1998-10-28

R APELICATION NUMBER: 60/106248

R RILING DATE: 1998-10-29

R RILING DATE: 1998-10-29

R APELICATION NUMBER: 60/10644

R FILING DATE: 1998-10-30

R APELICATION NUMBER: 60/106905
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R FILING DATE: 1998-09-17

R APPLICATION NUMBER: 60/101477

R FILING DATE: 1998-09-23

R APPLICATION NUMBER: 60/101738

R PILING DATE: 1998-09-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R APPLICATION NUMBER: 60/098544
R FILING DATE: 1998-08-31
R APPLICATION NUMBER: 60/099596
R APPLICATION NUMBER: 60/099598
R APPLICATION NUMBER: 60/099598
R FILING DATE: 1998-09-09
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PRIOR APPLICATION NUMBER: 60/108787
PRIOR FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: 60/108801
PRIOR FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: 60/108801
PRIOR PLING DATE: 1998-11-17
                                  APPLICATION NUMBER: 60/090695
FILING DATE: 1998-06-25
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APPLICATION NUMBER: 60/099816
FILING DATE: 1998-09-10
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APPLICATION NUMBER: 60/100385
FILING DATE: 1998-09-15
APPLICATION NUMBER: 60/100390
FILING DATE: 1998-09-15
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APPLICATION NUMBER: 60/101786
FILING DATE: 1998-09-25
APPLICATION NUMBER: 60/101916
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FILING DATE: 1998-11-18
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FILING DATE: 1998-12-15
APPLICATION NUMBER: 60/113296
FILING DATE: 1998-12-22
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FILING DATE: 1998-07-07
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APPLICATION NUMBER: 60/097986
FILING DATE: 1998-08-26
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APPLICATION NUMBER: 60/100848
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APPLICATION NUMBER: 60/095302
FILING DATE: 1998-08-04
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FILING DATE: 1998-08-04
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APPLICATION NUMBER: 60/099811
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APPLICANT: Geritsen, Mary
APPLICANT: Godowski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Gurney, Austin L.
APPLICANT: Smith, Victoria
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Watanabe, Colin L.
APPLICANT: Woodowski William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
    Gaps
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Indels
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CURRENT APPLICATION NUMBER: US/10/227, 884

CURRENT APPLICATION NUMBER: US/10/227, 884

CURRENT FILING DATE: 2002-08-26

PRIOR PELING DATE: 1997-09-17

PRIOR PELING DATE: 1997-09-17

PRIOR PELING DATE: 1997-10-17

PRIOR PELING DATE: 1997-10-28

PRIOR PELING DATE: 1997-10-31

PRIOR PELING DATE: 1998-03-26

PRIOR PELING DATE: 1998-03-26

PRIOR PELING DATE: 1998-03-26

PRIOR PELING DATE: 1998-04-15

PRIOR PELING DATE: 1998-05-22

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PRIOR PELING DATE: 1998-05-22

PRIOR PELING DATE: 1998-05-12

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PRIOR PELING DATE: 1998-05-13

PRIOR PELING DATE: 1998-05-12

PRIOR PELING DATE: 1998-05-13

PRIOR PELING DATE: 1
    Mismatches
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APPLICATION NUMBER: 60/090557
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US-10-227-884-78
Sequence 78, Application US/10227884
Publication No_US200300279881
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APPLICATION NUMBER: 60/090691
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                                                                                                                                     44 RQRYLYTDDAQQTEAH
    16; Conservative
    Matches
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Application US/10230163

Baker, Kevin P. Desnoyers, Luc Gerritsen, Mary Goddard, Audre

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Sequence 78, Appropriation No.
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100.0%; Pred. No. 1.7e-06;
ive 0; Mismatches 0;
                                                                                                                                                                                                                             APPLICATION NUMBER: 60/119549
FILING DATE: 1999-02-10
APPLICATION NUMBER: 60/123618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/127887
FILING DATE: 1999-04-05
APPLICATION NUMBER: 60/130232
FILING DATE: 1999-04-21
                                                      APPLICATION NUMBER: 60/115558
FILING DATE: 1999-01-12
                                                                                                                   APPLICATION NUMBER: 60/115565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/131022
FILING DATE: 1999-04-26
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FILING DATE: 1999-04-27
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APPLICATION NUMBER: 60/140650
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FILING DATE: 1999-07-20
APPLICATION NUMBER: 60/145698
FILING DATE: 1999-07-26
                                                                                                                                                                             APPLICATION NUMBER: 60/115733
                                                                                                                                                                                                                                                                                                                   FILING DATE: 1999-03-10
APPLICATION NUMBER: 60/125259
                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/125775
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FILING DATE: 1999-03-29
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FILING DATE: 1999-04-27
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FILING DATE: 1999-06-23
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APPLICATION NUMBER: 60/169835
CATION NUMBER: 60/113621
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                                                                                                                                           FILING DATE: 1999-01-12
                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1999-03-19
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Best Local Similarity
Matches 16; Conserv
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APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Gurney, Austin L.
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Watanabe, Colin L.
APPLICANT: Watanabe, Colin L.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3530PIC96 CURRENT APPLICATION NUMBER: US/10/230,163
CURRENT FILING DATE: 2002-08-28
PRIOR APPLICATION NUMBER: 10/19,480
PRIOR FILING DATE: 2002-04-09
PRIOR APPLICATION NUMBER: 60/059113 APPLICATION NUMBER: 60/062287 FILING DATE: 1997-10-17 APPLICATION NUMBER: 60/063549 FILING DATE: 1997-10-28 APPLICATION NUMBER: 60/064103 FILING DATE: 1997-10-31 PPLICATION NUMBER: 60/079728 (LING DATE: 1998-03-27 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081955 APPLICATION NUMBER: 60/085323 FILING DATE: 1998-05-13 APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/089532 FILING DATE: 1998-06-17 APPLICATION NUMBER: 60/090557 FILING DATE: 1998-06-24 APPLICATION NUMBER: 60/090691 FILING DATE: 1998-06-25 APPLICATION NUMBER: 60/090695 FILING DATE: 1998-06-25 PPLICATION NUMBER: 60/091982 ILING DATE: 1998-07-07 APPLICATION NUMBER: 60/078910 PLICATION NUMBER: 60/079656 CATION NUMBER: 60/081819 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/084441 FILING DATE: 1998-05-06 PPLICATION NUMBER: 60/086392 ILING DATE: 1998-05-22 APPLICATION NUMBER: 60/090472 FILING DATE: 1998-06-24 RIOR APPLICATION NUMBER: 60/069873 CATION NUMBER: 60/079294 APPLICATION NUMBER: 60/082804 APPLICATION NUMBER: 60/089538 APPLICATION NUMBER: 60/089905 LING DATE: 1998-04-15 998-03-20 LING DATE: 1998-06-18 1998-06-1 998-03-LING DATE: ö Gapa ö Indels

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APPLICATION NUMBER: 60/095302

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PRIOR APPLICATION NUMBER, 60/09516
PRIOR PILING DATE: 1998-08-04
PRIOR PLILING DATE: 1998-08-04
PRIOR PLILING DATE: 1998-08-11
PRIOR PLILING DATE: 1998-08-17
PRIOR PLILING DATE: 1998-08-17
PRIOR PLILING DATE: 1998-08-17
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PRIOR PLILING DATE: 1998-09-19
PRIOR PLILING DATE: 1998-09-19
PRIOR PLILING DATE: 1998-09-10
PRIOR PLILING DATE: 1998-09-16
PRIOR PLILING DATE: 1998-09-18
PRIOR PLILING DATE: 1998-09-24
PRIOR PLILING DATE: 1998-10-29
PRIOR PLILING DATE: 1998-10-29
PRIOR PLILING DATE: 1998-10-
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| PRIOR APPLICATION NUMBER: 60/1549
| PRIOR APPLICATION NUMBER: 60/1549
| PRIOR APPLICATION NUMBER: 60/1549
| PRIOR APPLICATION NUMBER: 60/15468
| PRIOR ELINE NO BATE: 1999-01-10
| PRIOR PATION DATE: 1999-02-10
| PRIOR PATION DATE: 1999-02-20
| PRIOR PATION DATE: 1999-02-20
| PRIOR PATION DATE: 1999-03-20
| PRIOR PATION DATE: 1999-04-27
| PRIOR PATION DATE: 1999-06-22
| PRIOR PATION DATE: 1999-06-22
| PRIOR PATION DATE: 1999-06-22
| PRIOR PATION DATE: 1999-06-23
| PRIOR PATION DATE: 1999-06-21
| PRIOR PATION DATE: 1999-11-09
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Query Match
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Matches 16; Conserv
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APPLICANT: STEPAN, JGEOTIA I.
APPLICANT: Watanabe, Colin L.
APPLICANT: Watanabe, Colin L.
APPLICANT: Watanabe, Colin L.
APPLICANT: Watanabe, Colin L.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILER REPRESENCE: P3530P1C92
CURRENT PILING DATE: 2002-08-28
RIOR APPLICATION NUMBER: 10/119, 480
RRIOR APPLICATION NUMBER: 60/069913
RRIOR PILING DATE: 1997-09-17
RRIOR PILING DATE: 1997-09-17
RRIOR PILING DATE: 1997-0-10-7
RRIOR PILING DATE: 1997-10-17
RRIOR PILING DATE: 1997-10-17
RRIOR PILING DATE: 1997-10-31
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RRIOR PILING DATE: 1997-10-31
RRIOR PILING DATE: 1998-03-26
RRIOR APPLICATION NUMBER: 60/079294
RRIOR PILING DATE: 1998-03-25
RRIOR APPLICATION NUMBER: 60/079294
RRIOR PILING DATE: 1998-03-26
RRIOR APPLICATION NUMBER: 60/079284
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APPLICANT: Gerritsen, Mary
APPLICANT: Geddard, Audrey
APPLICANT: Goddwaki, Paul J.
APPLICANT: Grimaldi, T. Christopher
APPLICANT: Grimaldi, T. Christopher
APPLICANT: Grim, Victoria
APPLICANT: Smith, Victoria
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Watanabe, Colin L.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3530P1C14
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SEQ ID NO 78
LENGTH: 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.0%; Score 86; DB 14; Length 208; Best Local Similarity 100.0%; Pred. No. 1.7e-06; Matches 16; Conservative 0; Mismatches 0; Indels
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                     Goddard, Audrey
Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Smith, Victoria
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Publication No. US20030045687A1
GENERAL INFORMATION:
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Gerritsen, Mary
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US-10-230-338-78
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APPLICANT: Gurney, Austin L.
APPLICANT: Gurney, Austin L.
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Watanabe, Colin L.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILLE OF INVENTION: ACIDS ENCODING THE SAME
FRICH APPLICATION NUMBER: 00/062287
FRICH FILLING DATE: 1997-10-17
FRICH APPLICATION NUMBER: 60/063249
FRICH APPLICATION NUMBER: 60/06349
FRICH APPLICATION NUMBER: 60/063073
FRICH APPLICATION NUMBER: 60/063073
FRICH FILLING DATE: 1997-12-17
FRICH APPLICATION NUMBER: 60/063073
FRICH APPLICATION NUMBER: 60/063073
FRICH FILLING DATE: 1997-12-17
PRIOR PILING DATE: 2002-04-09
PRIOR PLING DATE: 1997-10-17
PRIOR PILING DATE: 1997-10-17
PRIOR PLILING DATE: 1997-10-17
PRIOR PLILING DATE: 1997-10-17
PRIOR PLILING DATE: 1997-10-17
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PRIOR PLILING DATE: 1997-10-31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 86; DB 14;
100.0%; Pred. No. 1.7e-06;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Baker, Kevin P.
APPLICANT: Desnoyers, Luc
APPLICANT: Gerritsen, Mary
APPLICANT: Goddard, Audrey
APPLICANT: Goddwski, Paul J. .
APPLICANT: Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 78, Application US/10230414
Publication No. US20030050448A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1997-12-17
APPLICATION NUMBER: 60/078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PILING DATE: 1998-03-20
APPLICATION NUMBER: 60/079294
FILING DATE: 1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 RORYLYTDDAQQTEAH 16
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ORGANISM: Homo Sapien
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WESULT 15

US-10-232-24-78

Sequence 79, Application US/1023224

Publication No. Piszon30065147A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

APPLICANT: Geniover, Luc

APPLICANT: Geniover, Luc

APPLICANT: Godwald, Mary

APPLICANT: Godwald, Mary

APPLICANT: Godwald, Mainery

APPLICANT: Godwald, Mainery

APPLICANT: Stephen Jean-Philippe P.

APPLICANT: Stephen Jean-Philippe P.

APPLICANT: Watanabe, Colin L.

PRIOR APPLICANTON NUMBER: 60/065913

PRIOR APPLICANTON NUMBER: 60/06913

PRIOR PLICANTON NUMBER: 60/06913

PRIOR PLICANTON NUMBER: 60/06913

PRIOR PLICANTON NUMBER: 60/07924

PRIOR PLICANTON NUMBER: 60/07926

PRIOR APPLICATION NUMBER: 60/07926

PRIOR PLICANTON NUMBER: 60/07926

PRIOR APPLICATION NUMBER: 60/07926

PRIOR PLICANTON NUMBER: 60/07926
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SEQ ID NO 78
LENGTH: 208
PRIOR APPLICATION NUMBER: 60/079656
PRIOR FILING DATE: 1998-03-26
PRIOR PILING DATE: 1998-03-27
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 246
SEQ ID NO 78
LENGTH: 208
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                                                                                                                                                                                                                                                                                                                                      Length 208;
                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                      100.0%; Score 86; DB 14;
100.0%; Pred. No. 1.7e-06;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                1 RQRYLYTDDAQQTEAH 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.
Matches 16; Conservative
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; ORGANISM: Homo Sapien
US-10-232-224-78
                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                US-10-230-414-78
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Gaps .

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1 RORYLYTDDAQQTEAH 16
                 44 RORYLYTDDAQOTEAH 59
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8
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Search completed: July 8, 2005, 22:44:50 Job time: 20.0667 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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OM protein - protein search, using sw model

July 8, 2005, 22:03:50 ; Search time 3.93333 Seconds (without alignments) 391.390 Million cell updates/sec Run on:

1 RQRYLYTDDAQQTEAH 16 US-10-060-765-7 86 Title: Perfect score: Sequence: BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 segs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		di			SUMMARIES	
Result No.	Score	Query Match	Length	DB	ID	Description
	46	53.5	349	7	T00526	probable GDSL-moti
7	43	50.0	2225	~	T26063	hypothetical prote
m	41	47.7	93	~	S28726	
4	41	47.7	349	7	T00525	
S		46.5	332	~	T25023	hypothetical prote
9	40	46.5		~	C70385	hypothetical prote
7	40	46.5		~	JE0181	
œ	40	46.5		7	B34612	zinc finger protei
60	40	46.5	266	8	S59382	hypothetical prote
10	40	46.5		-	VPXRYM	outer layer protei
11		46.5		ď	T21986	
12	40	46.5		~	T21993	hypothetical prote
13	39	45.3		~	C36819	. Cll protein - rabb
14	39	45.3	263	~	G90294	
15	39	45.3		7	T18857	cal
16	39	45.3	439	~	B95927	
17	39	45.3		~	T11663	probable phosphopr
18	39	45.3		7	JC5869	beta-glucosidase (
19	38	44.2		~	T33962	hypothetical prote
20	38	44.2		~	AI0633	probable membrane
21	38	44.2	344	~	T01629	probable GDSL-moti
22	38	44.2	457	~	B64790	yclB protein - Esc
23	38	44.2	460	~	885555	probable resistanc
24	38	44.2	460	~	B90705	probable resistanc
25	38	44.2	580	~	F81042	
26	38	•	280	~	A81989	probable periplasm
27		44.2	747	Н	VPXR4S	outer layer protei
28	38	44.2	775	-	JQ1638	layer
29	38	44.2	775		JQ1639	outer layer protei

outer layer protei outer layer protei outer layer protei outer layer protei	_ 04 04 €	transposable eleme hypothetical prote hypothetical prote two-component hybr	orf la protein - L afaA protein - Bsc hypothetical prote
VPXRT2 JQ2022 VPXRB3 VPXRS1 VPXRT1	S24410 S03611 B82756 T48933	B32494 A99580 T18499 AG1897	B36861 D55545 AE3288
анана	0000	0 0 0 0 0	000
775 776 776 776	776. 776 792 1051	1308 1426 1619 1645	2396 101 145
4 4 4 4 4 4 4 4 4 2 2 2 2 2 5	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 4 4 4 4 4 4 4 5 5 5 5 5	44.2 43.0
8 8 8 8 8 8 8 8 8 8	88888	8 8 8 8 6 6 6 6	38 37
30 33 34 34	35 37 38 38	3 4 4 4 7 7 7 8 7 8	444 647

## ALIGNMENTS

RESULT 1 T00526  T00526  Tobable GDSL-motif lipase/hydrolase [imported] - Arabidopsis thaliana Pydharnate names: hypothetical protein T20KZ4.7 C.Species: Arabidopsis thaliana (mouse-ear cress) C.Date: 01-Feb-1999 #sequence_revision 01-Feb-1999 #text_change 09-Jul-2004 C.Accession: T00526; A84572	R;Rounsley, S.D.; Kaul, S.; Lin, X.; Ketchum, K.A.; Crosby, M.L.; Brandon, R.C submitted to the EMBL Data Library, July 1997 A;Description: Arabidopsis thaliana chromosome II BAC T20K24 genomic sequence. A;Reference number: 214167 A;Accession: T00526	A;SCHUB: LIBHIBIECE ITOM GB/EMBL/DDBJ A;Rolecule type: DNA A;Rosidues: 1.349 <rou> A;Rosidues: 1.349 <rou> A;Coss-references: UNIFROT:O64469; EMBL:AC002392; NID:g3176701; PID:g3176708 A;Experimental source: cultivar Columbia R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Ful;</rou></rou>
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don, R.C.; Sykes,

M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, L. euss, D.; Nierman, W.C.; White, O.; Eisen, M.; VanAken, S.E.; Umayam, L.; Tallon, L. euss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, J. Nature 402, 761-768, 1999
A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana. A;Reference number: A84420; MUID:20083487; PMID:10617197
A;Accession: A84572
A;Accession: A84572
A;Molecule type: DNA
A;Molecule type: DNA
A;Kesidues: 1-349 <STO>
C;Genetics:
C;Genetics:

A;Gene: At2g19060; T20K24.7 A;Map position: 2 A;Introns: 81/1; 122/3; 197/3; 282/1 C;Superfamily: myrosinase-associated protein MyAP

Length 349;

Gaps ö 4; Indels Query Match 53.5%; Score 46; DB 2; Best Local Similarity 53.3%; Pred. No. 2.2; Matches 8; Conservative 3; Mismatches

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1 RORYLYTDDAOOTEA 15 ŝ

|:||:| |: ||| 310 RERYVYWDNVHSTEA 324 셤

RESULT 2 T26063

hypothetical protein W01F3.3 - Caenorhabditis elegans Cispecies: Caenorhabditis elegans Cipate: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004 Cipate: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004 Cipate: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004 Richmings, P.
Aireference number: 220145

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Gaps

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A;Residues: 1-332 <WIL>
A;Cross-references: UNIPROT:Q9XUN3; EMBL:Z81593; PIDN:CAB04743.1; GSPDB:GN00023; CESP:T2
A;Experimental source: clone T20B3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: UNIPROT:067110; GB:AE000717; NID:g2983492; PIDN:AAC07076.1; PID:g298
A;Experimental source: strain VF5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Deckert, G.; Warren, P.V.; Gaasterland, T.; Young, W.G.; Lenox, A.L.; Graham, D.B.; Ov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A, Title: The complete genome of the hyperthermophilic bacterium Aquifex aeolicus. A, Reference number: A70300; MUID:98196666; PMID:9537320
                             A,Molecule type: DNA
A,Reafdues: 1-349 <STO>
A,Cross-references: GB:AE002093; NID:g3176707; PIDN:AAD12023.1; GSPDB:GN00139
C,Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hypothetical protein T20B3.5 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004 C;Accession: T25023
R;Mortimore, B. Bubb Data Library, November 1996
A;Reference number: Z19970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Species: Aquifex aeolicus
C;Date: 08-May-1998 #sequence_revision 08-May-1998 #text_change 09-Jul-2004
C;Accession: C70385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
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                                                                                                                                                                                                                                                                                                                     Length 349;
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                                                                                                                                                                                                                                                                                                                                                                                4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Map position: 5
A;Introns: 110/1; 246/3
C;Superfamily: Caenorhabditis hypothetical protein C49G7.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 2;
30;
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A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                               Query Match 47.7%; Score 41; DB 2; Best Local Similarity 46.7%; Pred. No. 17; Matches 7; Conservative 4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 40; DB 2;
Pred. No. 24;
2; Mismatches
                                                                                                                                                                                           A;Map position: 2
A;Introns: 82/1; 123/3; 198/3; 281/1
C;Superfamily: myrosinase-associated protein MyAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  46.5%; Score 40; DB ilarity 37.5%; Pred. No. 30; Conservative 4; Mismatches
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Best Local Similarity 50.v.
Best Local 8; Conservative
                                                                                                                                                              A; Gene: T20K24.6; At2g19050
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Best Local Similarity
Matches 6; Conserva
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A; Residues: 1-403 < AQF>
   A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Gene: CESP: T20B3.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypothetical protein 1 (insertion sequence ISL1) - Lactobacillus casei
C; Species: Lactobacillus casei
C; Species: Lactobacillus casei
C; Date: 11-Mar-1998 #sequence_revision 17-Apr-1998 #text_change 09-Jul-2004
C; Accession: S28726
R; Shimizu-Kadota, M.; Kiwaki, M.; Hirokawa, H.; Tsuchida, N.
Mol. Gen. Genet. 200, 193-198, 1985
A; Title: ISL1: a new transposable element in Lactobacillus casei.
A; Reference number: S28726; MUID:85295506; PMID:2993817
A; Accession: S28726
A; Mulolecule type: DNA
A; Molecule type: DNA
A; Residues: 1-93 < SHI>
A; Cross-references: UNIPROT:P71428; EMBL:X02734; NID:91279518; PIDN:CAA26516.1; PID:9439
A; Cross-references: UNIPROT:P71428; EMBL:X02734; Rianin C239
C; Genetics:
A; Mobile element: insertion sequence ISL1; strain C239
C; Superfamily: Shigella flexneri conserved hypothetical protein tnpJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nyllernate names: hypotherical protein T20K24.6
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 01-ebe-1999 #sequence_revision 01-Peb-1999 #text_change 09-Jul-2004
C;Accession: T00525; H84571
R;Rounsley, S.D.; Kaul, S.; Lin, X.; Ketchum, K.A.; Crosby, M.L.; Brandon, R.C.; Sykes, submitted to the EMBL Data Library, July 1997
A;Description: Arabidopsis thaliana chromosome II BAC T20K24 genomic sequence.
A;Reference number: Z14167
A;Becrerce number: Z14167
A;Reference number: Z14167
A;Reference number: Lanslated from GB/EMBL/DDBJ
A;Reference number: Lanslated from GB/EMBL/DDBJ
A;Reference number: Z14167
A;Reference number: Z14167
A;Reference number: Z14167
A;Reference number: Z14167
A;Reference number: Lanslated from GB/EMBL,AC002392; NID:G3176701; PID:G3176707
A;Reference number: Ryll, S.; Rounsley, S.D.; Shea, T.P.; Benitco, M.I.; Town, C.D.; Fujii, C.Y.;
R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benitco, M.I.; Town, C.D.; Fujii, C.Y.;
Ruls, S., Rounsley, S.D.; Shea, T.P.; Benitco, R.; Fraser, C.M.; Venter, J.
Ruls, S., S., Rounsley, S.D.; Shean, M.; VanAken, S.E.; Umayam, L.; Tallon, L.
euss, D.; Miarman, W.C.; White, O.; Elsen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, J.
A;Reference number: A84420; MUID:20083487; PMID:10617197
A;Reference number: A84420; MUID:20083487; PMID:10617197
A;Accession: T26063
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-2255 <WILb
A;Cross-references: UNIPROT:045881; EMBL:292815; PIDN:CAB07294.1; GSPDB:GN00023; CESP:WG
A;Experimental source: clone W01F3
A;Experimental source: clone W01F3
A;Genetics:
A;Genetics:
A;Genetics:
A;Genetics: 3,71; 142/3; 271/3; 451/1; 525/3; 774/1; 1093/1; 1178/1; 1221/1;
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N.Alternate names: hypothetical מרחרים חימית ל
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                                                                                                                                                                                                                                                                                                                                                ilarity 53.8%; Score 43; DB 2; Length 2225; Conservative 3; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 41; DB 2; Length 93;
Pred. No. 3.7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   / Match
Local Similarity 61.5%;
hes 8; Conservative
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477 QRYFYNEDSQKCE 489
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nes 7; Conserv
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Best Local S
Matches 7
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A;Molecule type: DNA
A;Residues: 1-566 «FAV»
A;Cross-references: UNIPROT:Q06696; EMBL:U20162; NID:g632669; PIDN:AAB67493.1; PID:g6326
A;Experimental source: strain S288C (AB972)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Accession: A40342
R;Lopez, S.; Lopez, I.; Romero, P.; Mendez, E.; Soberon, X.; Arias, C.F.
Virol. 65, 3738-3745, 1991
A;Title: Rotavirus YM gene 4: analysis of its deduced amino acid sequence and prediction A;Reference number: A40342; MUID:91251227; PMID:1645789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Cross-references: UNIPROT: P25174; GB: M63231; NID: 9333323; PIDN: AAA47100.1; PID: 9333324 C; Superfamily: rotavirus outer layer protein VP3 C; Superfamily: rotavirus outer layer protein; glycoprotein; hemagglutinin C; Keywords: capsid protein; cat protein; glycoprotein; hemagglutinin Fi.1-241/Product: outer layer processing #status predicted <VP8> F: 248-776/Product: catavage processing #status predicted <VP5> F: 248-776/Product: outer layer protein VP5 #status predicted <VP5> F: 17, 32, 56, 97, 116, 132, 151, 178, 183, 198, 325, 670/Binding site: carbohydrate (Asn) (covalent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A,Map position: 1
A,Introns: 37/3; 102/2; 229/3; 317/3; 375/2; 505/3; 546/1; 668/3; 833/1; 904/2; 941/3; 9
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A;Cross-references: EMBL:Z92834; PIDN:CAB07385.1; GSPDB:GN00019; CESP:F39B2.4a
A;Experimental source: clone F39B2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N.Alternate names: hemagglutinin; VP4 protein
N.Contains: outer layer protein VP5; outer layer protein VP8
C.Species: porcine rotavirus C
C.Species: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypothetical protein F39B2.4a - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
C;Accession: T21986
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                                                                                                                                                                                                                                                                                                            Length 566;
                                                                                                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             outer layer protein VP3 - porcine rotavirus C (strain YM)
N;Alternate names: hemagglutinin; VP4 protein
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43.8%; Pred. No. 1.6e+02;
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A;Molecule type: DNA
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5
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Pred. No. 45;
3; Mismatches
                                                                                                                                                                                   A;Gene: SGD:VPS36
A;Cross-references: SGD:S0004409; MIPS:YLR417w
A;Map position: 12R
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                                                                                                                                                                                                                                                                                                                46.5%;
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Best Local Similarity 53.0.
To Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: genomic RNA
A; Residues: 1-776 < LOP>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R,Dobson, R. submitted to the EMBL Data A,Reference number: 219498 A,Accession: T21986
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Matches 7; Conserv
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S59382
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C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 22-Un-1990 #sequence_revision 09-Oct-1992 #text_change 09-Jul-2004
C;Accession: B34612
B;Lania, L.; Dondi, E.; Pannuti, A.; Pascucci, A.; Pengue, G.; Feliciello, I.; La Mantia
R;Lania, L.; Dondi, E.; Pannuti, A.; Pascucci, A.; Pengue, G.; Feliciello, I.; La Mantia
Genomics 6, 333-340, 1990
A;Title: CDNA isolation, expression analysis, and chromosomal localization of two human
A;Reference number: A34612; MUD:90169993; PMID:2106481
A;Accession: B34612
A;Residues: L-543 < LAN>
A;Residues: L-543 < LAN>
A;Residues: L-543 < LAN>
A;Cross-references: UNIPROT:P17098; GB:M29581; NID:g340447; PIDN:AAA61314.1; PID:g340448
C;Genetics:
A;Gene: GDB:ZNF8
A;Cross-references: GDB:120510; OMIM:194532
A;Map position: 20413-20413
C;Superfamily: zinc finger protein ZFP-36; LIM metal-binding repeat homology
C;Keywords: DNA binding; zinc finger
                                                                                                                                                                                                                                           C;Species: Bacillus flavocaldarius KP1228
C;Date: 21-Aug-1998 #sequence_revision 21-Aug-1998 #text_change 09-Jul-2004
C;Date: 21-Aug-1998 #sequence_revision 21-Aug-1998 #text_change 09-Jul-2004
C;Accession: JE0181
R;Kashiwabara, S; Matsuki, Y.; Kishimoto, T.; Suzuki, Y.
Biosci. Biotechnol. Biochem. 62, 1093-1102, 1998
A;Title: Clustered proline residues around the active-site cleft in thermostable oligo-1A;Reference number: JE0181; MUID:98357218; PMID:9692189
A;Accession: JE0181
A;Molecule type: DNA
A;Residues: 1-529 cKAS.
A;Cross-references: UNIPROT: Q9F237; DDBJ:AB003697
C;Superfamily: alpha-glucosidase; alpha-amylase core homology
C;Keywords: glycosidase; hydrolase
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hypothetical protein YLR417w - yeast (Saccharomyces cerevisiae)
NyAlternate names: hypothetical protein L9931.3
NyAlternate names: hypothetical protein L9931.3
C;Species: Saccharomyces cerevisiae
C;Species: 30-Nov-1995 #sequence_revision 23-Feb-1996 #text_change 09-Jul-2004
C;Accession: S59382
R;Favello, A.
R;Favello, A.
Bubmitted to the EMBL Data Library, January 1995
A;Description: The sequence of S. cerevisiae cosmid 9931.
A;Reference number: S59376
                                                                                                                                                                                                              oligo-1,6-glucosidase (EC 3.2.1.10) - Bacillus flavocaldarius KP1228
C;Species: Bacillus flavocaldarius KP1228
C;Date: 21-Aug-1998 #sequence_revision 21-Aug-1998 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         zinc finger protein ZNFB - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 22-Jun-1990 #sequence_revision 09-Oct-1992 #text_change 09-Jul-2004
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Pred. No. 42;
4; Mismatches
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                                | :|||:| :| |:
227 RHEHLYTEDQPETYAY 242
1 RORYLYTDDAQQTEAH 16
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A; Description: Sulfolobus solfataricus complete genome
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Best Local Similarity 70.v.
                               A, Reference number: A99139
A, Accession: G90294
A, Status: preliminary
A, Molecule type: DNA
A, Residues: 1-263 < KUR>
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                                                                                                                                                                                                                                                                                                   A; Gene: SSO1380
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(26819)
C11 protein - rabbit fibroma virus
C15pecies: rabbit fibroma virus
C15pecies: rabbit fibroma virus, Shope fibroma virus
C15pecies: rabbit fibroma virus, Shope fibroma virus
C15pecies: 23-Apr-1993 #sequence_revision 23-Apr-1993 #text_change 07-May-1999
C15Accesion: C36819
R15trayer, D.S.; Jerng, H.H.; O'Connor, K.
Virology 185, 588-595, 1991
A;Title: Sequence and analysis of a portion of the genomes of Shope fibroma virus and ma A;Title: Sequence and MulD:92074222; PMID:1660196
A;Stetus: translation not shown
A;Status: translation not shown
A;Status: translation not shown
A;Status: translation not shown
A;Status: translation and shown
A;Status: translation and shown
A;Status: translation and shown
B;Status: translation not shown
A;Status: translation and shown
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A;Status: translation not shown
B;Status: 
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G90294
G90294
Gypothetical protein SS01380 [imported] - Sulfolobus solfataricus
Cypothetical protein SS01380 [imported] - Sulfolobus solfataricus
Cypothetical protein Solfataricus
Cypoteles: 24-May-2001 #sequence_revision 24-May-2001 #text_change 09-Jul-2004
CyAccession: G90294
Ryshe, Q.; Singh, R.K.; Confalonieri, F.; Zivanovic, Y.; Allard, G.; Awayez, M.J.; Chandong, I.; Jeffries, A.C.; Kozera, C.J.; Medina, N.; Peng, X.; Thi-Ngoc, H.P.; Redder, Farrett, R.A.; Ragan, M.A.; Sensen, C.W.; Van der Oost, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Introns: 37/3; 102/2; 229/3; 317/3; 375/2; 505/3; 546/1; 670/3; 835/1; 906/2; 943/3;
                                                                                                                                                                                                                                                                                                                           hypothetical protein F39B2.4b - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
C;Accession: 721993
R;Dobson, R.
Submitted to the EMBL Data Library, March 1997
A;Accession: 721993
A;Accession: 721993
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Accession: 721993
A;Easiduse: 1-1663 < WIL
A;Residuse: 1-1663 < WIL
A;Cross-references: EMBL: 292834; PIDN: CAB07394.1; GSPDB: GN00019; CESP: F39B2.4b
A;Experimental source: clone F39B2
C;Genetice:
A;Gene: CESP: F39B2.4b
A;Map position: 1
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Pred. No. 28;
2; Mismatches 3; Indels
   Indels
   9
Mismatches
3;
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                                                                          1 RQRYLYTDDAQQTEAH 16
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Best Local Similarity 58.3%;
Matches 7; Conservative
7; Conservative
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Matches
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A;Cross-references: UNIPROT:Q97YE6; GB:AE006641; NID:g13814594; PIDN:AAK41614.1; GSPDB:G;C;Genetics:
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A; Cross-references: UNIPROT:Q93177; EMBL:Z79596; NID:e1323798; PIDN:CAB01858.1; GSPDB:GNC
A; Experimental source: clone C02C6
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C;Species: Caenorhabditis elègans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T18857
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A;Introns: 9/3; 46/3; 95/2; 135/1; 176/3; 209/3
C;Superfamily: Caenorhabditis elegans hypothetical protein C02C6.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 278;
                                                                                                                        2; Length 263;
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                                                                                                                                                                         4; Indels
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submitted to the EMBL Data Library, August 1996
A;Reference number: Z19032
A;Accession: T18857
A;Accession: T18857
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 39; DB 2;
Pred. No. 30;
1; Mismatches
                                                                                                                  Query Match
45.3%; Score 39; DB
Best Local Similarity 50.0%; Pred. No. 28;
Matches 7; Conservative 3; Mismatches
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5.1.6	Compugen
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	Copyright

OM protein - protein search, using sw model

Run on:

July 8, 2005, 21:54:48; Search time 19.2667 Seconds (without alignments) 425.256 Million cell updates/sec

US-10-060-765-7 86 1 RQRYLYTDDAQQTBAH 16 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

1612378 seqs, 512079187 residues Searched:

1612378 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

	Description	Q9nsal homo sapien		Q8vi80 rattus norv	Q9jjn1 mus musculu		_					Q63km0 burkholderi	Q62cg0 burkholderi	P71428 lactobacill	Q7xaq1 houttuynia	064468 arabidopsis	Q7xmq2 oryza sativ	Q9fssl oryza sativ	Q48525 lactobacill	Q9zhd6 neisseria g		Q8g5k2 bifidobacte		Q6tg15 avian adeno	-					-	Q6a570 bradyrhizob	Q6us18 knautia mac
SUMMERTES	aı	FGFL HUMAN	Q8N6 <u>8</u> 3	Q8VI80	FGFL MOUSE	064469	Q758A5	Q65610	Q6BPY1	Q8IBC1	045881	Q63KM0	Q62CG0		Q7XAQ1	064468	Q7XMQ2	Q9FSS1	Q48525	HEM1_NEIGO	Q64XE9	Q8G5K2	DEG1				Q9EYX7	Q6CT95	Февков	Q9XUN3	Q6A570	Qeuslb
	DB	į -	~	~	-	N	~	~	~	N	~	~	~	~	~	~	~	N	~	г	~	~	-	~	7	~	~	~	N	~	N	7
	Length DB	209	209	208	210	349	267	233	622	1916	2225	099	671	93	243	349	355	355	385	415	712	1031	1121	1255	1255	712	174	203	323	332	401	403
d	Query Match	100.0	100.0	87.2	87.2	53.5	51.2	50.0	50.0	50.0	50.0	48.3	48.3	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.1	•	•	•	46.5	46.5	46.5
	Score	98	98	75	75	46	44	43	43	43	43	41.5	41.5	41	41	41	41	41	41	41	41	41	41	41	41	40.5	40	40	40	40	40	40
	Result No.	1	7	٣	4	Ŋ	9	7	80	Φ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	53	30	31

067110 aquifex aeo Q6u124 cryptococcu				P1/098 nomo sapien Q06696 saccharomyc	Q67sd2 symbiobacte Q6pi99 homo sapien	P89057 rotavirus s	P25174 porcine rot	Q6pcz6 mus musculu
O67110 CMT1 CRYNE	Q8L341 Q8T0C8	Q9F237 Q9RA62	0708G0	2008 HUMAN Q06696	Q67SD2 Q6P199	P89057	VP4 ROTPY	Q6PCz6
2 4	0 0	0 0	α,	H 73	0 0	0	н	0
403	506 518	529 529	537	543 566	567	775	176	819
46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
4 4 0 0	4 4 0 0	4 4 0 0	04	4 4 0 0	4. 4 0 0	4	40	40
33	34	36 37	38	2. 4. 2. O	4 1 4 2 4	43	44	45

# ALIGNMENTS

Gaps

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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: Belongs to the heparin-binding growth factors family.
EMBL; AB078901; BAB84299.1; -.
HSSP; O95750; 1PWA.
GO; GO:0008083; F:growth factor activity; IEA.
PF00167; FGF; 1.
SIMILARITY: Belongs to the heparin-binding growth factors family., BC018404; AAH18404.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 86; DB 2; Length 209; 100.0%; Pred. No. 3.8e-07; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ch 87.2%; Score 75; DB 2; Length 208 1 Similarity 87.5%; Pred. No. 3.7e-05; 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                     209 AA; 22284 MW; 27925C43E5167823 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     208 AA; 22857 MW; D232445902CDB8EA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-2002 (TrEMBLrel. 20, Created)
1-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Pibroblast growth factor 21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-UDL-2004 (Rel. 44, Last amoctation update)
Fibroblast growth factor-21 precursor (FGF-21)
                             EMBL; BC018404; AAH18404.1; -... HSP; O95750; 1PWA. GO; GO:0008089; F:growth factor activity; IEA. InterPro; IPR008996; Cytok ILL 11ke. InterPro; IPR002209; HB/F growthfact. InterPro; IPR002209; HB/F Growthfact.
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                                                                                                                                                                                                                         Pfam; PF00167; FGF; 1.
PRINTS; PR00263; HBGFFGF.
PRINTS; PR00262; IL1HBGF.
ProDom; PD000831; IL1 HBGF; 1.
SMART; SM00442; FGF; 1.
Growth factor.
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PRINTS; PRODZ63; HBGFPGF.
PRODOM; PD000831; ILIHBGF.
SMART; SM00442; FGF; T.
Growth factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.0%;
Matches 16; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 RORYLYTDDAQOTEAH 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Rat).
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Mus musculus (Mouse)
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Q9JJN1;
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Q8VI80;
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ID FGFL M
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DT 16-OCT
DT 05-JUL
DE Fibrob
GN Name=F
OS Mus mu
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WEDINE-21388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
Strausberg R.L., Peingold E.A., Grouse L.H., Derge J.G.,
Ridusner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
A Distchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Bronstein M.J., Usdin T.B., Toshiyuki S., Carninoi P., Prange C.,
A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Willalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Rahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Miting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Mitsing M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
M. Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29 209 Fibroblast growth factor-21.
23 23 Missing (in Ref. 2).
209 AA; 22300 MW; 27925C52A0023823 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
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Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
                                                                           R GO; GO: 0005576; C: extracellular; TAS.

R GO; GO: 0005576; C: extracellular; TAS.

R GO; GO: 0007267; C: extracellular; TAS.

R GO; GO: 0007165; P: signal transduction; TAS.

R GO; GO: 0007165; P: signal transduction; TAS.

R InterPro; IPR00229; C; Cytok IL1 like.

InterPro; IPR002248; IL1 HBGF.

R InterPro; IPR002248; IL1 HBGF.

R PRINTS; PR00262; IL1HBGF.

R PRODGS; PR00263; HBGFPGF.

R PRODGS; PR00263; HBGFPGF.

R PRODGS; PR00264; IL1 HBGF; IL1 HBGF.

R PRODGS; PR00265; IL1 HBGF.

R PRODGS; PR00265; IL1 HBGF; IL1 H
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01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Fibroblast growth factor 21,.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hoc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
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Pred. No. 3.8e-07;
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      EMBL; AB021975; BAA99415.1; -. EMBL; AY359086; AAQ89444.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.0%;
Matches 16; Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                     HSSP; P03968; 1BAR
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064469;
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Nausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
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Blatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleton M., Soares M.B., Bonaldow N.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Tooshiyuki S., Carninci P., Frange C.,
Brass S.A., McWann P.J., McKernan K.J., Marason R.D., Mullahy S.J.,
Brichards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Nilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Nilting M., Madan A., Young A. Scherkenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,
Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Bronerzel A., Schein J.B., Jones S.J.M., Marra M.A.,
Bronerzel A., Schein J.B., Jones R.J.M., Marra M.A.,
Br
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                                                                SEQUENCE FROM N.A. MADMed=10858549; DOI=10.1016/S0167-4781(00)00067-1; MEDLINE-20461777; PubMed=10858549; DOI=10.1016/S0167-4781(00)00067-1; Nishimura T., Nakatake Y., Konishi M., Itoh N.; "Identification of a novel PGF, FGF-21, preferentially expressed in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    expressed in the thymus at lower levels.
-!- SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            roc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
|- SUBCELLULAR LOCATION: Secreted (Potential).
|- TISSUB SPECIFICITY: Most abundantly expressed in the liver, also
Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUB=Testis;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                    STRAIN=C57BL/6J; TISSUR=Pancreas;
MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
                                                                                                                                                                                 lochim. Biophys. Acta 1492:203-206(2000)
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use by non-profit institute. There are no restrictions on its modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Bukaryota, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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Town C.D., Kaul S.;
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databaees.
EMBL; AC002392; AAD12024.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHAIN 29 210 Fibroblast growth factor-; SEQUENCE 210 AA; 23237 MW; AE02AABA6477E6F0 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-AUG-1998 (TrEMBLrel. 07, Last sequence update) 01-JUN-2003 (TrEMBLrel. 24, Last annotation update) Putative GDSL-motif lipase/hydrolase.
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InterPro; IPR001087; Lipase_GDSL.
Pfam; PF00657; Lipase_GDSL; 1.
Hydrolase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Potential.
Fibroblast
                                                                                                                                                                                                                                                                                                                                                                                                          Prodom; PD000831; IL1 HBGF; 1.
SMART; SM00442; FGF; 1.
PROSITE; PS00247; HBGF_FGF; FALSE_NEG.
                                                                                                                                                                                                                                                MGD; MGI:1861377; Fgf21.
InterPro; IPR008996; Cytok IL1 like.
InterPro; IPR002209; HB/F growthfact.
InterPro; IPR002348; IL1_HBGF.
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                                                                                                                                                            EMBL; AB025718; BAA99416.1; -. EMBL; AK007574; BAB25115.1; -. EMBL; BC049592; AAH49592.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            87.2%;
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PRINTS; PR00262; IL1HBGF.
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Dujon B., Sherman D., Fischer G., Durrens P., Casaregola S.,
Lafontaine I., de Montigny J., Marck C., Neuveglise C., Talla B.,
Goffard N., Frangeul L., Aigle M., Anthouard V., Babour A., Barbe V.,
Barnay S., Blanchin S., Beckerich JM., Beyne E., Bleykasten C.,
Boisrame A., Boyer J., Cattolico L., Confanioleri F., de Daruvar A.,
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Zeniou-Meyer M., Zivanovic I., Bolotin-Fukuhara M., Thierry A.,
Bouchier C., Caudron B., Scarpelli C., Gaillardin C., Weissenbach J.,
T., "Genome evolution in yeasts.";
                                                                                                                                                                                                                                      ORFNames=DEHAOE10450g;
Debaryowyces hansenii CBS767.
Bukaryota; Fungi; Ascomyoota; Saccharomycotina; Saccharomycetes; Saccharomycetales; Saccharom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seeger K., Murphy L., Harris D., Berriman M., Pain A., Hall N., Quail M., Barrell B., Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases.
Bypothetical protein.
SEQUENCE 1916 AA; 230013 MW; 68FF914B8A3519BD CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Plasmodium falciparum (isolate 3D7).
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genoscope;
Submitted (JUL-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; CR382137; CAG87975.1; -.
SEQUENCE 622 AA; 69830 MW; 423B43A5EB6A897D CRC64;
                                                                                                                 25-OCT-2004 (TrEMBLrel. 28, Created)
25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
Similar to CA0631|IPF11698 Candida albicans IPF11698.
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Ol-MAR-2003 (TrEMBLrel. 23, Last sequence update)
Ol-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Hypothetical protein MAL8P1.11.
Name=MAL8P1.11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50.0%; Score 43; DB 2;
60.0%; Pred. No. 76;
cive 1; Mismatches
                                                            622 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT; 1916 AA
                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   568 RHRYLNTDDLOEDGA 582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 RORYLYTDDAQQTEA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 60.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nature 430:35-44(2004).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=284592;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=CBS767;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genolevures;
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                                                     QGBPY1
QGBPY1;
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QRIBC1
RESULT 8
                               Q6BPY1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Viruses, ssRNA negative-strand viruses; Bunyaviridae; Orthobunyavirus.
VCBI_TaxID=80939;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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Dunn E., Pritlove D.C., Elliott R.M.;
Dunn E., Pritlove D.C., Elliott R.M.;
Dunn E., Pritlove D.C., Elliott R.M.;
J. Gen. Virol. 75:597-60 (1994).
EMBL, X73467; CAA51849-1; -.
GO; GO:0019013; C:viral nucleocapsid; IEA.
Probom; PP00522; Bunya nucleocap.
Pfam; PP00522; Bunya nucleocap; 1.
Probom; P0001909; Bunya nucleocap; 1.
SEQUENCE 233 AA; 26578 MW; 3D34022413505CF6 CRC64;
                                                                                                                                                                                                                                                                Ashbya gossypii (Yeast) (Bremothecium gossypii).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Bremothecium.
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                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN=ATCC 10895;
Gates K., Dietrich F.S., Brachat S., Voegeli S.E., Lerch A.,
Philippsen P., Gaffney T.;
Submitted (SEP-2004) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: Contains 3 WD repeats.
AGD; AEL153W; --.
AGD; AEL153W; --.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            51.2%; Score 44; DB 2; Length 567; 50.0%; Pred. No. 45; tive 3; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       / Match 50.0%; Score 43; DB 2; Length 233; Local Similarity 50.0%; Pred. No. 25; 1.00 nes 8; Conservative 3; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SECTION STREET SET AA; 62678 MW; SIBE672E94A0309B CRC64;
                                                                                                           05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
                                                        567 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     233 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGD; AELLSSW; DROOJ680; WD40.
INTERPEYS; IPROOJ680; WD40.
INTERPTO; IPRO11046; WD40_like.
PFfam; PFF00400; WD40; 5.
SWART; SMO0320; WD40; 5.
PROSITE; PS50082; WD_REPEATS_2; 1.
PROSITE; PS50294; WD_REPEATS_REGION; 2.
                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                299 RRRYMHTWDLMNTTAH 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182 RORYMNLDASOWTOKH 197
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8; Conservative
                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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Best Local Similarity
Matches 8; Conserv
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                                                                                                                                                                                                                                          ORFNames=AEL153W;
                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=33169;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kairi virus.
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OG 565

DD 10-N

DD

Best Loc Matches

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Gaps

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5; Indels

Length 622;

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STRAINEK96243;

X PubMed=15377794;

A Holden Mr.G., Titball R.W., Peacock S.J., Cerdeno-Tarraga A.M.,

A Holden Mr.G., Titball R.W., Peacock S.J., Cerdeno-Tarraga A.M.,

A Atkins T., Crosman L.C., Pitt T., Churcher C., Mungall K.,

Bentley S.D., Sebaihia M., Thomson N.R., Bason N., Beacham I.R.,

Brooks K., Brown K.A., Brown N.F., Challis G.L., Cherevach I.,

Chillingworth T., Cronin A., Crosset B., Davis P., DeShazer D.,

Reithwell T., Fraser A., Hance Z., Hauser H., Holroyd S., Jagels K.,

Keith K.E., Maddison M., Moule S., Price C., Quail M.A.,

A Rabbinowitsch B., Rutherford K., Sanders M.,

Songsivilai S., Stevens K., Tumapa S., Vesaratchavest M.,

Mitchead S., Yeats C., Barrell B.G., Oyston P.C.F., Parkhill J.;

"Genomic plasticity of the causative agent of melioidosis,
                                                                     Burkholderia pseudomallei K96243.
Bacteria, Proteobacteria, Betaproteobacteria, Burkholderiales,
Burkholderiaceae, Burkholderia.
NCBI_TaxID=272560,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Burkholderia pseudomallei.";
Proc. Natl. Acad. Sci. U.S.A. 101:14240-14245(2004).
EMBL; BX571966; CAH38812.1;
SEQUENCE 660 AA; 68694 MW; AC6780FCSCB5C33C CRC64;
                           Putative cysteine desulfurase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    48.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             || : |||| |||
235 RY-FVDDAQPTNAH 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 RYLYTDDAQQTEAH 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 64.3 es 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=243160;
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                                                                                                                                                                                                                 SEQUENCE FROM N.A.
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Matches
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R WormBeas; WBGene00012186; W01F3.3.

R WormPep; W01F3.3; CE16531.

R GO: 0004867; R: Serine-type endopeptidase inhibitor activity; IEA.

R InterPro; IPR002223; Prot_Inh Kunz-m.

R InterPro; IPR000116; Thyroglobulin_1.

R Pfam; PF00014; Kunitz_BPTi; 1.

R Pfam; PR00014; Kunitz_BPTi; 1.

R Pfam; PR00014; Kunitz_BPTi; 1.

R PRINTS; PR00759; BASICFTASE.

R SMART; SM00231; TY; 1.

R SMART; SM02211; TY; 1.
                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Caenorhabditis elegans.
Bukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
Rhabditidae; Peloderinae; Caenorhabditis.
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                           Length 1916;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Genome sequence of the nematode C.elegans: A platform for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
STRAIN=BATSISTOL N2;
Cummings P.N.;
Submitted (MAR-1997) to the EMBL/GenBank/DDBJ databases.
-! SIMILARITY: Contains 10 BPTI/Kunitz inhibitor domains.
EMBL; Z92815; CAB07294.1;
-PIR; T26063; T26063.
                                                                              4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2225 AA; 242197 MW; A5DD8AE9D2A7B02A CRC64;
                                                                                                                                                                                                                                                                                                                                                                     01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
01-JUN-2004 (TrEMBLrel. 26, Last annotation update)
Hypothetical protein WOIF3.3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Last sequence update)
Last annotation update)
                         Score 43; DB 2; I
Pred. No. 2.8e+02;
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                                                                                4; Mismatches
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PROSITE; PS50279; BPTI KUNITZ 2; 10.
PROSITE; PS00484; THYRŌGLOBULIN 1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-Bristol N2;
MEDLINE-99069613; PubMed-9851916;
                         50.0%;
                                                                                                                                                                 :: |:| || :| || 1299 KENYIYIDDGNETE 1312
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          investigating biology.";
Science 282:2012-2018(1998).
                                                                                                                                1 RORYLYTDDAQQTE 14
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2 ORYLYTDDAQOTE 14
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                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=6239;
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Q63KM0;
25-OCT-2004 (
25-OCT-2004 (
25-OCT-2004 (
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045881
10 045881
DT 01-37
DT 
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Matches
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Q63KM
1D Q63KM
AC Q63KM
DT 25-OC
DT 25-OC
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Gaps

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Score 41.5; DB 2; Length 660; Pred. No. 1.5e+02; 1; Mismatches 3; Indels

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                                                                                                                      Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
Burkholderiaceae; Burkholderia.
                                                                                                                                                                                                                                                                                                                                                                                                  48.3%; Score 41.5; DB 2; Length 671;
64.3%; Pred. No. 1.5e+02;
tive 1; Mismatches 3; Indels 1
                           25-OCT-2004 (TrEMBLrel. 28, Created)
25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
671 AA
PRT;
                                                                                         ORFNames=BMAA0933;
Burkholderia mallei ATCC 23344.
                                                                           Cysteine desulfurase, putative.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  || : |||| | ||
RY-FVDDAQPTNAH 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 RYLYTDDAQQTEAH 16
                                                                                                                                                                                                                                                                                                                                                                                                                                    9; Conservative
PRELIMINARY;
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Search completed: July 8, 2005, 22:18:04
Job time: 22.2667 secs
                                                    SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                          064468;
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                                                                                                                                                                                                                                                                                                                                 RESULT 15
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Spermatophyta, Magnoliophyta, magnoliids, Piperales, Saururaceae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GO; GO:0005634; C:nucleus; IEA.
GO; GO:0003700; F:transcription factor activity; IEA.
GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                            STRAIN=Group B;
MEDILINE=85295506; PubMed=2993817;
Shimizu-Kadota M., Kiwaki M., Hirokawa H., Tsuchida N.;
"ISL1: a new transposable element in Lactobacillus casei.";
Mol. Gen. Genet. 200:193-198(1985).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     47.7%; Score 41; DB 2; Length 93; 61.5%; Pred. No. 20; 3; Indels tive 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lactobacillus casei.
Bacteria; Firmicutes; Lactobacillales; Lactobacillaceae;
Lactobacillus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=Group B;
Shimizu-Kadota M.;
Submitted (APR-1996) to the EMBL/GenBank/DDBJ databases.
EMBL; X02734; CAA26516.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CG); S26126; S
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01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Name=HCSEP1;
                                                                                                01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
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                                                                              Created)
                            PRT;
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InterPro; IPR002487; TF Kbox.
InterPro; IPR002100; TF_MADSbox.
Pfam; PP01486; K-box; 1.
Fam; PF00319; SRF-TF; 1.
SMART; SW00432; MADS; 1.
PROSITE; PS00350; MADS_BOX_1; 1.
                                                                           -FEB-1997 (TrEMBLrel. 02,
                                                                                                                                                     Transposable element ISL1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 61.5*
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 RORYLYTDDAQQT 13
                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                        NCBI_TaxID=1582;
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PROSITE; PS50066; MADS_BOX_2; 1.
DNA-binding; Nuclear protein; Transcription; Transcription regulation.
SEQUENCE 243 AA; 27728 MW; 7B34DBEE4609D8B8 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.

Rounsley S.D., Kaul S., Lin X., Ketchum K.A., Crosby M.L.,
Rounsley S.D., Kaul S.M., Mason T.M., Kerlavage A.R., Adams M.D.,
Somerville C.R., Venter J.C.;
Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
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                                                                                                     Length 243;
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                                                                                                                                                            7; Indels
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Town C.D., Kaul S.;
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AC002392; AAD12023.1; -.
PIR; T00525; T00525.
GO; GO:0016787; Fiydrolase activity; IEA.
InterPro; IFR001087; Lipase GDSL.
Pfam; PF00657; Lipase GDSL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       349 AA; 38577 MW; 05DAC363EA5F3D2A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-AUG-1998 (TrEMBLrel. 07, Created)
1-AUG-1998 (TrEMBLrel. 07, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Putative GDSL-motif lipase/hydrolase.
                                                                                                     47.7%; Score 41; DB 2;
50.0%; Pred. No. 59;
rative 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                  349 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Name=At2g19050;
Arabidopsis thaliana (Mouse-ear cress).
                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                 168 RRKLLQLDDGSQTNPH 183
                                                                                                                                                                                                             1 RORYLYTDDAQQTEAH 16
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309 QRRYVYWDNVHSTEA 323
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                                                                               Query Match
Best Local Similarity 50.00
Best Local Similarity 50.00
Conservative
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Matches 7; Conservative
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Novel Human

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Add 68907 Human P
Add 28907 Human P
Add 9027 Human P
Add 9027 Human P
Add 9027 Novel h
Add 7150 Novel h
Add 7150 Novel h
Add 7177 Novel h
Add 7777 Novel h
Add 5078 Novel h
Add 5072 Novel h
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Add 5023 Human P
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ADC21797
ADC49828
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ADC49824
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ADC7779
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8, 2005, 21:53:57; Search time 19.625 Seconds (without alignments) 295.613 Million cell updates/sec
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Compugen Ltd.
     version -
                         OM protein - protein search, using sw model
                                                                              BLOSUM62
Gapop 10.0 , Gapext 0.5
     GenCore
Copyright (c) 1993
                                                                   1 HLPGNKSPHRDPAPR 15
                                                        US-10-060-765-8
89
                                    July
                                                                               Scoring table:
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# ALIGNMENTS

100.0

2105692

Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 200000000

Minimum DB 8 Maximum DB 8

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

A_Geneseq_16Dec04:* .: geneseqp1980s:* ?: geneseqp1990s:*

Database :

geneseqp2000s:* geneseqp2001s:* geneseqp20028:*

geneseqp2003as:*geneseqp2003bs:* geneseqp2004s:*

2105692 segs, 386760381 residues

Searched:

Perfect score:

Run on:

Sequence:

h; cell differentiation; rth factor-21 (FGF-21). ; testicular cancer; proliferative disorder.

WO200136640-A2.

25-MAY-2001

16-NOV-2000; 2000WO-US031745. 

18-NOV-1999; 99US-0166540P. 11-MAY-2000; 2000US-0203633P.

(CHIR ) CHIRON CORP. (KYOU ) UNIV KYOTO.

Itoh N, Kavanaugh WM;

WPI; 2001-343823/36.

New nucleic acid molecule useful for treating disease, e.g. infertility, impotence, or testicular cancer.

Claim 17; Page 40; 61pp; English.

The present sequence represents an epitope-bearing portion of human dibroblast growth factor-21 (FGF-21). FGF proteins regulate growth and differentiation of a variety of cell types. FGF-21 nucleic acids and polypeptides are useful for treating diseases and disorders characterised by inadequate numbers of hepatic cells, preferably cirrhosis of the liver. They may also be used in the treatment of infertility, impotence, and testicular cancer, as well as leukemia, lymphoma, autoimmune disease, or proliferative disorders of the thymus

Sequence 15 AA;

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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		Description	Aab68419 Epitope-b	Abb81312 Human FGF	Aau00965 Human Fib	Adl57109 Human NOV	Aae05078 Human fib	Aau83630 Human PRO	Abg32358 Human fib	Human	Abu80777 Human PRO	Abo33743 Novel hum	Novel	Human	Abj72266 Human PRO	Abj72394 Human PRO	Human	Ada37038 Human fib	Abj72096 Human mem	Adb83568 Novel hum	Novel	Adb73215 Novel hum	Adb78297 Novel hum	Adb84945 Human PRO	Adb78051 Novel hum	7 Human	Adb84699 Human PRO
SUMMARIES		ID	AAB68419	ABB81312	AAU00965	ADL57109	AAE05078	AAU83630	ABG32358	AAE17601	ABU80777	AB033743	ABU82086	ABP96156	ABJ72266	ABJ72394	ABO34289	ADA37038	ABJ72096	ADB83568	ADB80674	ADB73215	ADB78297	ADB84945	ADB78051	ADB87117	ADB84699
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		Length	15	124	181	183	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208
o)(c)		Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		Score	89	89	89	83	83	89	89				88		68	83		88			89	89	89	89	83	89	89
	Result	. No.	7	7	m	4	'n	Q	7	60	o	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Gaps

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Indels

Pred. No. 7.4e-05; ; Mismatches 0;

100.08; Pre

15; Conservative 1 HLPGNKSPHRDPAPR

Matches

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Best Local Similarity

15

101 HLPGNKSPHRDPAPR 115

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The present invention describes an active variant (1) of a fibroblast growth factor (FGF) having at least one mutation in the beta-9-beta-9 loop, having enhanced specificity for one receptor subtype compared to the corresponding wild type FGF, by decreasing the biological activity mediated by at least one receptor subtype while retaining the activity mediated through another receptor subtype while retaining the activity of succepturing a mediated through another receptor subtype. (1) has cytostatic, vulnerary, of vasculogenesis or angiogenesis. (1) is useful for preparing a mediacement and for treating a disease or disorder related to normal or abnormal FGF receptors (FGFRs), especially skeletal disorders, cancer, to chance bone fracture healing or bone growth processes and wound healing processes. (1) is useful in detection and treatment of various FGFR related disorders including skeletal disorders e.g. achondroplasia, hypochondroplasia, and osteoporosis, and cartilage defects, multiple myeloma, epithelial cancers such as transitional cell carcinoma of the bladder and cervical carcinoma. The novel mutants are useful in high expression systems suitable for pharmaceutical production, targeting of drugs or other agents to tissues and cells having specific FGFRs subtypes, and serve as template for the formation of improved agonists and cancers and and serve as template for the formation of improved agonists and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New variants of fibroblast growth factor, useful for treating skeletal disorders including osteoporosis, malignancies and to enhance wound and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fibroblast growth factor 9; FGF-9; cytostatic; vulnerary; osteopathic; antiarthritic; vasculogenesis; angiogenesis; FGFR; skeletal disorder; fibroblast growth factor receptor; cancer; bone fracture healing; bone growth; wound healing; achondroplasia; hypochondroplasia; osteoporosis; cartilage defect; multiple myeloma.
                                                                                                  Gaps
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, DB 4; Le.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human FGF21 core structure amino acid sequence.
                         Score 89; DB Pred. No. 9.46; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                     ABB81312 standard; protein; 124 AA.
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                         100.0%; Sc
100.0%; Pr
tive 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-OCT-2001; 2001WO-IL000962.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-OCT-2000; 2000IL-00139380.
                                                                                                                                                                        1 HLPGNKSPHRDPAPR 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Adar R, Yayon A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
              Query Match
Best Local Similarity 100.
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-479754/51.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-MAY-2002.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB81312;
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ABB 1312
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Pibroblast Growth Factor; FGF; treatment; cirrhosis; mucositis; diabetes; inflammatory bowel disease; Crohn's disease; obesity; tubular necrosis; renal tubule damage; gastrointestinal abnormality; wasting syndrome; neurodegenerative disease; haematopoietic cell reconstitution; cachexia; chemotherapy; corneal epithelium damage; retinal tissue damage; myopathy; acromegaly; premature maturation; alopecia; short stature; delayed maturation; excessive growth; acromegaly; premature maturation; alopecia; bronchopulmonary dysplasia; androgen target organ abnormality; respiratory distress syndrome; stroke; cancer; atherosclerosis; hypercholesterolaemia; osteoporosis; alongss;

Human Fibroblast Growth Factor-like (FGF-like) polypeptide fragment.

AAU00965 standard; protein; 181 AA.

RESULT 3

24-MAY-2001 (first entry)

AAU00965;

osteoarthritis; muscle atrophy; sarcopenia; wrinkles; increased fatigue; decreased stamina; decreased cardiac function; immune system dysfunction; Parkinson's disease; Alzheimer's disease; decreased cognitive function;

senile dementia; human

WO200118172-A2.

15-MAR-2001

Homo sapiens

05-SEP-2000; 2000WO-US024373. 07-SEP-1999; 99US-00391861. 23-AUG-2000; 2000US-00644052.

Thomason AR, Liu B; WPI; 2001-226743/23.

(AMGE-) AMGEN INC.

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The sequence represents a fragment of a fibroblast growth factor-like (FGF-like) polypeptide. FGF-like protein and its associated nucleic acid play a role in modulating body growth, maturation or life-span. They are also useful for treating, preventing or ameliorating disorders such as cirrhosis, inflammatory bowel disease, mucositis, Crohn's disease, clasease, damage to renal tubules as a result of acute tubular necrosis, hematopoietic cell reconstitution following chemotherapy, wasting cardines (e.g., cancer associated cachexia), damage to the corneal cyndromes (e.g., cancer associated cachexia), damage to the corneal captalium, lens or retinal tissue, multiple sclerosis, myopathies, short stature, delayed maturation, excessive growth (e.g. acromegaly), cremature maturation, acute respiratory distress syndrome, tumours of the eye or other tissues, atherosclerosis, hypercholesterolemia, crock of the eye or other tissues, atherosclerosis, hypercholesterolemia, carches, osteoporosis, osteoarthritis, muscle atrophy, sarcopenia, baldness, wrinkles, increased fatigue, decreased stamina, decreased cardiac function, immune system dysfunction, cancer, Parkinson's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel isolated fibroblast growth factor-like polypeptide useful for treating, preventing or ameliorating cirrhosis, inflammatory bowel disease, mucositis, Crohn's disease, diabetes, obesity, stroke and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 14; Page 116-117; 138pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   osteoporosis.
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cancer. The present sequence represents a FGF core structure amino acid sequence which is given in the exemplification of the present invention

DB 5; Length 124;

100.0%; Score 89;

Sequence 124 AA;

Query Match

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Binding-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Protein
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                                                                                                                                                                                                                                                            antiarteriosclerotic; anorectic; vincide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antibactariansonian; dermatological; nottasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; FGRA; complement factor I precursor; metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; antileukoproteinase-1 precursor; antileukoproteinase 1 precursor; Ly-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel isolated polypeptide (NOVX) comprising mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, anorectic, cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide, antibacterial, fungicide, protozoacide, nootropic,
senile dementia, Alzheimer's disease, and decreased cognitive function
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obseity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhong M, Guo X, Anderson DW, Ort T, Padigaru M, Rieger DK;
                                            Length 181;
                                                               0; Indels
                                                                                                                                                                                                                                                     human; antidiabetic; anorectic; cardiant; hypotensive;
                                           Score 89; DB 4; I Pred. No. 0.00011;
                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 54; 214pp; English.
                                                                                                                                                               ADL57109 standard; protein; 183 AA.
                                                                                                                                                                                                                                Human NOV6a protein SEQ ID NO:54.
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                                          100.0%;
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2002US-0410320P.
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2002US-0412766P.
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2002US-0412767P.
                                                                                                117 HLPGNKSPHRDPAPR 131
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                                                                                     1 HLPGNKSPHRDPAPR 15
                                                                                                                                                                                                          03-JUN-2004 (first entry)
                                       Query Match
Best Local Similarity 100.
Matches 15, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-315567/29.
N-PSDB; ADL57108.
                      Sequence 181 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                     WO2004022723-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-SEP-2002;
24-SEP-2002;
25-SEP-2002;
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                                                                                                                                                                                      ADL57109;
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ID ADL
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cc neuroprotective, antiparkinsonian, anticonvulsant, osteopathic, antiathratic, antinflammatory, dermatological, antiathratic, antiaflammatory, dermatological, antiathratic, antiaflammatory, dermatological, antiathratic, antiaflammatory, dermatological, antiathratic, antiaflammatory, dermatological, antiaflammatory as use in gene therapy. The polympetides, nucleic acid molecules and antibodies are useful in the manufacture of a medicament for treating a syndrome cassociated with a human disease, preferably a NOX.associated disorder. The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or disgnosing diseases such as metabolic disorders, diabetes, obesity, infectious diseases, crital, bacterial, fungal, helmithic, and protozoal), anorexia, cancer, cardiovascular diseases (helminthic, and protozoal), anorexia, cancer, cardiovascular diseases (soliepsy, inferentiation) and various dyslipdaemias. The nucleic acide and polypeptides at the modulate or inhibit e.g. neurogenesis, cell differentiation, cell casthma, and various dyslipdaemias. The nucleic acide and polypeptides constants of antibodies that bind immunospecifically to Noving substances for use in therapeutic or diagnostic methods. The nucleic cacids are further used as hybridistion probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenemics. The Noving substances for use in therapeutic or diagnostic methods. The nucleic cords are further used as hybridistion probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenemics. Novia shows homology to fibroblast growth factor receptor (PGFR4); NOV2a shows homology to fibroblast growth factor: NOV3a shows homology to complement factor I precursor; NOV3a shows homology to tibroblast growth factor.

(PGFR4); NOV3a-1 show homology to tibroblast growth factoriants (PGFR4); NOV3a-3 show homology to tibroblast growth factoriants precursor; NOV3a-5c show homology to tibroblast growth factoriants precursor; NOV3a-1 show homology to
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/label= Human_mature_zFGF11_protein
44. .46
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/label= Signal_peptide
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1es 15; Conservative
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Trepression agreements in the control of the control of the cells. StGRII general is located on chromosomal 19. StGRII is useful for stimulating proliferation of mesenchymal cells, osteoblastic lineage cells. StGRII is useful for identifying chromosomal disorders associated with abnormal expression of stGRII protein. StGRII is also useful for stimulation, inhibition or proliferation of myocytes, smooth muscle adjacents, cells, and neuronal progenitors, pancreatic cells, prostatederived cells and neuronal progenitors, pancreatic cells, prostatederived cells and endothelial cells and inhibiting chondrosarcomas, catherosclerosis and obseity. Stimulation of osteoblasts restences and obseity. Stimulation of osteoblasts cresults in bone formation useful for treating bone defects, fractures, osteoporosis and other deficiencies in bone structure and formation.

STGRII is useful for treating disorders associated with diabetes mellitus, neural cell development or degeneration, amyotrophic lateral schenois and encronal differentiation and congenital disorders of the nervous system or lack of neuronal development, promoting angiogenesis and wound healing, for reveascularisation in eye, complications related to poor circulation such as diabetic food ulcers, improving cardiac function, modulating surfactant production in the lung epithelium, to reduce damage to the tissue caused by ischaemia or ischaemia-reperfusion events, particularly in the heart or brain and for inducing skeletal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        present sequence is human fibroblast growth factor (FGF) homologue, F11 protein. zFGF11 gene is located on chromosome 19. zFGF11 is useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel zFGF11 polypeptide and polynucleotide, a member of fibroblast growth factor family, for stimulating proliferation of mesenchymal, osteoblastic lineage cells and treating diabetes, obesity, osteoporosis,
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Pred. No. 0.00012;
Mismatches 0; Indels
/note= "Heparin binding domain"
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                                                                                                                                                                                                                                                                                                                                                                                                                (ZYMO ) ZYMOGENETICS INC.
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ses 15; Conserv
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                                                                                  WO200149849-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conklin DC,
                                                                                                                                                                     12-JUL-2001
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stimulating the release of tumour necrosis factor-alpha from human blood, for stimulating or inhibiting the proliferation of normal human dermal fibroblast cells. The PRO polypeptide may also be used as molecular weight markers and for tissue typing. The PRO nucleic acids have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. AAU83592-AAU83713 represent human PRO protein sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           One hundred and twenty two nucleic acids encoding PRO polypeptides, useful for treating a PRO related disorder and for diagnosing tumors such as lung cancer, colon cancer, breast tumor, prostate tumor, rectal tumor
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Smith V, Stephan JF, Watanabe CK, Wood WI;
breast cancer; prostate tumour; rectal tumour; liver tumour; pericyte cell proliferation; chondrocyte cell proliferation; tumour necrosis factor-alpha.
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2000US-022063BP.
2000US-0220664P.
2000US-0220666P.
2000US-0220666P.
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2000US-0220605P.
2000US-0220607P.
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C, Gurney AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GETH ) GENENTECH INC
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                                                                                                WO200208288-A2.
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                                                                  Homo sapiens
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22-AUG-2000;
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10-NOV-2000;
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20-DEC-2000;
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100.0%; Score 89; DB 5; Length 208;

Query Match

Human; secreted protein; PRO; tumour; lung cancer; colon cancer;

Human PRO protein, Seg ID No 78.

(first entry)

08-MAY-2002

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AAU83630;

AAU83630 standard; protein; 208 AA.

AAU83630

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "Mature fibroblast growth factor homologue, zFGF11. This sequence is specifically claimed in claim 4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cell; FGFRIIIC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to an isolated human polypeptide (1) for zFGF11 (a fibroblast growth factor), and the encoding polynucleotide (II). (I) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; fibroblast growth factor; FGF; zFGFI1; mesenchymal cell; FGFRIII ostcoblastic lineage cell; diabetes mellitus; neuropathy; neural cell cell celloster, amyotrophic lateral sclerosis; cerebrovascular stroke; neuronal differentiation; congenital disorder; nervous system disorder; cardiac function; wound healing.
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                                                            Gaps
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                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human fibroblast growth factor (FGF) homologue, zFGF11.
                    0.00012;
hes 0;
                                                         Mismatches
                              Pred. No.
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/label= Signal_sequence
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                                                                                                                                                                                                                                                                                                                                                  ABG32358 standard; protein; 208 AA.
100.0%; Pic
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                                                                                                                                                                  05-JAN-2001; 2001US-00755695
                                                                                                                      1 HLPGNKSPHRDPAPR 15
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                                                         15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-626540/67.
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                           Best Local Similarity
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                                                         Matches
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Sequence 208 AA;

human zFGF11

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The present invention relates to new extracellular messenger polypeptides and polynucleotides encoding them. XMES is useful in the diagnosis, treatment and prevention of neurological disorders (e.g. epilepsy, stroke, or Alzheimer's disease), autoimmune/inflammatory disorders (e.g. equired immune deficiency syndrome, AIDS, Addison's disease, or allergies), developmental disorders (e.g. renal tubular acidosis, anaemia or Cushing's syndrome), endocrine disorders (e.g. hypophysectomy, ancurysm or vascular malformation), and cell proliferative disorders (e.g. cancer), and in the assessment of the effects of exogenous compounds on the expression of nucleic acid and maino acid sequences of extracellular messengers. XMES may also be used in the treatment of viral, bacterial, fungal, parasitic, protozoal and helminthic infections, trauma, disorders associated with hypopituitarism, thypothyroidism, hyperthyroidism or gonadal steroid hormones, and pancreatic disorders such as type II diabetes mallitus. The XMES may be used for somatic or germline gene therapy. The present
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                                                                                                                                                                                                                                                                                                                                                                          Human; extracellular messenger; neurological disorder; epilepsy; XMES-3; Alzheimer's disease; autoimmune disorder; renal tubular acidosis; stroke; acquired immune deficiency syndrome, AIDS, Addison's disease; cytostatic; developmental disorder; anaemia; Cushing's syndrome; endocrine disorder; vascular malformation; cell proliferative disorder; gene therapy; cancer; humanotective; trauma; hypopituliarism; hypothyroidism; antihelminthic; hyperthyroidism; antihelminthic; disorder; nootropic; diabetes mellitus; immunosuppressive; anti-infiammatory; antibacterial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR, Azimzał Y;
Lee S, Hafalia A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New extracellular messenger polypeptides and polynucleotides encoding them, useful for diagnosing, treating or preventing e.g. neurological autoimmune, inflammatory, developmental and endocrine disorders.
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                 Length 208;
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Lu Y, Baughn MR, Duggan BM, Lee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antiviral; antifungal; parasitic; protozoal; allergy
Score 89; DB 5; L/Pred. No. 0.00012;
                                                                                                                                                                                                                                                                                                                                        Human extracellular messenger (XMES)-3 protein.
                                                                                                                                                                                                                         AAE17601 standard; protein; 208 AA.
   100.0%; Sc.
100.0%; Pre
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23-JUN-2000; 2000US-0213465P.
14-NOV-2000; 2000US-0249019P.
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                                                                                                                              144 HLPGNKSPHRDPAPR 158
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               Query Match 100.
Best Local Similarity 100.
Matches 15; Conservative
                                                                                           1 HLPGNKSPHRDPAPR
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Tang YT,
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                                                                                                                                                                                                                                                                                                                                                                              Human; PRO polypeptide; secreted and transmembrane protein; anti-PRO antibody; diagnostic assay; gene expression; tumour; cytostatic.
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Smith V, Stephan JF, Watanabe CK, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           One hundred and twenty two nucleic acids encoding PRO polypeptides, useful for the manufacture of a medicament for diagnosing or treating
                                                                                              Gaps
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                                                             Length 208;
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                                              Score 89; DB 5; Length Zur
Pred. No. 0.00012;
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Best Local Similarity 100.0%; Pred. No. 0.00012;
Matches 15; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                             ABU80777 standard; protein; 208 AA
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sequence is human XMES-3 protein
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                                                             100.0%;
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01-JUN-2001; 2001WO-US017800.
29-JUN-2001; 2001WO-US021066.
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                                                                                                                                                          144 HLPGNKSPHRDPAPR 158
                                                                                                                              1 HLPGNKSPHRDPAPR 15
                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                               Human PRO polypeptide #39.
                                                             Query Match 100.
Best Local Similarity 100.
Matches 15; Conservative
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C, Gurney AL,
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                             Sequence 208 AA;
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The invention describes an isolated nucleic acid molecule comprising a sequence with at least 80% identity to: (a) a nucleotide encoding any of 122 PRO (secreted and transmembrane) polypeptides whose sequences are fully defined in the specification; or (b) any of 122 nucleotide comparing e.g. 4834, 2504 or 1759 bp fully defined in the sequences. The PRO polypeptides or polynucleotides are useful sequences. The PRO polypeptides or polynucleotides are useful cas pharmaceuticals, diagnostics, blosensors or bioreactors. These are particularly useful for detecting tumours (e.g. lung tumour, colon tumour) for stimulating the release of TMP-alpha from human blood, in a mammal, for stimulating the release of TMP-alpha from human blood, colls, for stimulating proliferation or differentiation of chondrocyte cells, for stimulating proliferation or differentiation of chondrocyte cells, for stimulating proliferation or differentiation of chondrocyte colls, encoural human dermal fibroblast proliferation. The PRO nucleic acid or polypeptide is also useful for treating tumours or various bone and/or cartilage disorders (e.g. sports injuries or arthritis), or wounds. The PRO polypeptides are useful in drug screening, particularly as targets of the therapeutic intervention in these diseases, and in the diagnostic cartilage disorders (e.g. sports injuries or arthritis), or wounds. CC arthriation. The PRO genes are useful as hybridisation probes, or for identification. The PRO genes are useful as hybridisation probes, or for also useful as molecular weight markers, or for chromosome calso useful in gene therapy, particularly for replacing a defective comes also be used in an enhance of a novel human secreted and transmembrane PRO polypeptide equence of a novel human secreted and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New genes, and its encoded secreted and transmembrane polypeptides, useful for stimulating Tumor Necrosis Factor alpha, or chondrocyte or pericyte proliferation, especially for treating lung tumors, arthritis or wounds in a mammal.
                                                                                                                                                                                                                                                                                                    Human; secreted and transmembrane protein; PRO; cytostatic; antiarthritic; osteopathic; gene therapy; TWP-Agonist-Alpha; chondrocyte stimulator; pericyte stimulator; fibroblast modulator; pharmaceutical; diagnostic; biosensor; bioreactor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; liver tumour; bone disorder; cartilage disorder; sports injury;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephan JF, Watanabe CK, Wood WI;
                                                                                                                                                                                                                                                        Novel human secreted and transmembrane protein PRO10196.
                                                                                                               ABO33743 standard; protein; 208 AA.
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09-APR-2002; 2002US-00119480.
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144 HLPGNKSPHRDPAPR 158
                                                                                                                                                                                                            (first entry)
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Grimaldi JC, Gurney AL,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-512315/48.
N-PSDB; ACD68631.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 arthritis; wound
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ABO33743
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Length 208;

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                                                                                                                                                                                                                                                                Human; secreted and transmembrane protein; PRO; cardiant; cytostatic; antiangiogenic; hypotensive; vulnenry; antiarteriosclerotic; gene therapy; cardiovascular disorder; endothelial disorder; andiogenic disorder; cardiac hypertrophy; trauma; cancer; age-related macular degeneration; atherosclerosis; hypertension; arterial restenosis; rheumatoid arthitis; angina; myocardial infarction; thrombophlebitis; lymphangitis; tumour angiogenesis; breast carcinoma; liver carcinoma; wound healing; chromosome mapping; gene mapping.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 encoding movel human secreted and transmembrane (PRO) polypeptides. The PRO nucleic acids, polypeptides, agonists and antagonists are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder in a mammal, e.g. cardiac hypertrophy, trauma, cancer, agerelated macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The PRO nucleic acids have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephan JF, Watanabe CK, Wood WI;
                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal.
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                         Length 208;
                        Score 89; DB 6; Length 20 Pred. No. 0.00012; 0; Mismatches 0; Indels
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                                                                                                                                                                ABU82086 standard; protein; 208
                      100.0%;
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01-JUN-2001; 2011WO-US017800.
29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
                                                                                        12-AUG-2002; 2002US-00219003.
                                                                          1 HLPGNKSPHRDPAPR 15
          Query Match
Best Local Similarity 100...
Local Similarity 100...
                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Baker KP, Desnoyers L,
Grimaldi JC, Gurney AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GETH ) GENENTECH INC.
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N-PSDB; ACA68535.
Sequence 208 AA;
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The present sequence represents human fibroblast growth factor 21 (FGF-21). FGF-21 is located to chromosome 19, more specifically to 19q13.1-qter. The present invantion describes a method for treating a mammal exhibiting type 2 diabetes or type 1 diabetes, or treating a mammal for obesity which comprises administering to the mammal a composition comprising FGF-21 which has at least 95% amino acid sequence identity to the 208 amino acid sequence given in ABP96156. Also described: (1) inducing an increase in glucose uptake in adipocyte cells by administering FGF-21 to induce an increase in glucose uptake; and (2) administering medicament for treating type 1 diabetes, type 2 diabetes or obesity in a mammal using FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity to ABP96156. FGF-21 having 95% amino acid sequence identity for treating a mammal for obesity. The method is preferably useful for treating humans exhibiting type 1 or type 2 diabetes, and for treating domestic animals for obesity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, fibroblast growth factor 21, FGF-21; chromosome 19, 19q13.1-qter,
diabetes, obesity, antidiabetic, anorectic; type 2 diabetes;
                                                                                                          Gapa
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Human fibroblast growth factor 21 protein SEQ ID NO:2.
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                                                                                                                                                                                                                                                                                                                                                                                                                        ABP96156 standard; protein; 208 AA.
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10-JAN-2002; 2002US-0347991P.
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                                 Query Match
Best Local Similarity
Matches 15; Conserv
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es 15, Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  type 1 diabetes.
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ABJ72266;

RESULT 13

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The invention relates to a novel isolated PRO protein encoding nucleic acid. The nucleic acid of the invention may be useful for preparing PRO polypeptides and anti-PRO antibodies for detecting the presence of a tumour in a mammal. Furthermore, the molecules of the invention may be useful for stimulating proliferation or gene expression in pericyte cells, the release of tumour necrosis factor (TNF)-alpha from human blood, the proliferation or differentiation of chondrocyte cells and for inhibiting the proliferation of normal human dermal fibroblast cells. Finally, the molecules may be utilised during gene therapy. The current sequence is that of the human PRO protein of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                      Gerritsen ME, Goddard A, Godowski ÞJ;
Smith V, Stephan JF, Watanabe CK, Wood WI;
                                       PRO; blood; proliferation; pericyte cell; TNF alpha; chondrocyte; tumour necrosis factor; proliferation; differentiation; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, chondrocyte stimulation; TNF-alpha stimulation; gene therapy;
human dermal fibroblast stimulation; tumour; tissue typing;
affinity purification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New PRO protein encoding nucleic acid, useful for preparing PRO polypeptides and anti-PRO antibodies for detecting the presence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 89; DB 6; I 100.0%; Pred. No. 0.00012;
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29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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Grimaldi JC, Gurney AL,
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Human PRO10196 protein.
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les 15; Conserv
                                                                                dermal fibroblast.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tumor in a mammal.
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                                                                                                                                                                    US2003027988-A1
                                                                                                                              Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a novel isolated nucleic acid encoding a fully defined PRO polypeptide. The molecules of the invention may be useful for stinulating proliferation or gene expression in pericyte cells or the release of TNF-alpha from human blood. Other possible uses include the stimulation or inhibition of chondrocyte proliferation or differentiation, the stimulation of human dermal fibroblast cell proliferation and the detection of the presence of a tumour within a mammal. Purthermore, the nucleic acid may be useful for the manufacture of a medicament for diagnosing or treating a tumour within a mammal or for measuring or detecting the expression of an associated gene, as well as during gene therapy. The current sequence is that of the human PRO protein of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid encoding for a PRO protein, useful for the manufacture of a medicament for diagnosing or treating tumors or for measuring or detecting expression of an associated gene.
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Smith V, Stephan JF, Watanabe CK, Wood WI;
                                                                                                                                                                                                                                                  PRO; proliferation; pericyte cell; TNF-alpha; blood; chondrocyte; differentiation; dermal fibroblast; tumour; gene therapy; cytostatic.
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100.0%; Pred. No. 0.00012;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABJ72394 standard; protein; 208 AA.
                                                                                     ABJ72266 standard; protein; 208 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
                                                                                                                                                                                                                                                                                                                                                                                                                                            28-AUG-2002; 2002US-00230414.
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Best Local Similarity 100.
Matches 15; Conservative
                                                                                                                                                                                                             Human PRO10196 protein
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Grimaldi JC, Gurney
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N-PSDB; ABT44264.
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US2003044934-A1

06-MAR-2003

(first entry)

06-NOV-2003

ABJ72394;

SAXEX

RESULT 14

8 셤 ABJ72394

Length 208; Indels

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Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephan JF, Watanabe CK, Wood WI;
                                                                                                                                        New transmembrane polypeptides and nucleic acids encoding the polypeptides, useful in gene therapy, in chromosome identification, as chromosome markers, or in generating probes.
                                                                                                                                                                               Claim 19; Fig 78; 315pp; English
                         01-JUN-2001; 2001WO-US017800.
29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
         28-AUG-2002; 2002US-00230338.
                                                                                 Baker KP, Desnoyers L, Grimaldi JC, Gurney AL,
                                                                (GETH ) GENENTECH INC.
                                                                                                            WPI; 2003-492274/46.
N-PSDB; ACD82214.
                                                                                Baker KP,
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polypeptide. Nucleic acids that encode PRO can be used to generate either transgenic animals or knock-out animals useful in developing and screening of therapeutically useful reagents. The nucleic acids may also be used in gene therapy for replacing defective gene, in chromosome identification, as chromosome markers, or in generating probes to isolate full length PRO cDNA. The PRO polypeptides are useful for chondrocyte stimulation, TWF-alpha stimulation, human dermal fibroblasts stimulation and for detecting the presence of thmour in an mammal. The PRO polypeptides are useful as molecular markers for protein electrophoresis and the isolated nucleic acids may be used for recombinantly expressing those markers. The PRO polypeptides and nucleic acids may also be used in tissue typing. Anti-PRO antibodies are useful in diagnostic assays for PRO and in affinity purification of PRO from recombinant cell culture or natural sources. The present sequence represents the amino acid sequence of a human secreted/transmembrane PRO polypeptide The invention relates to an isolated nucleic acid encoding a PRO

Query Match 100.0%; Score 89; DB 6; Length 208; Best Local Similarity 100.0%; Pred. No. 0.00012; Matches 15; Conservative 0; Mismatches 0; Indels Sequence 208 AA;

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US-10-060-765-8

Sequence 8, Application US/10060765

Publication Wo. US20020164713A1

GENERAL INFORMATION:

APPLICANT: Itoh, No. US20020164713Aluyuki

APPLICANT: Kavanaugh, W. Michael

TITLE OF INVENTION: HUMAN FGP-21 GENE AND GENE EXPRESSION

TITLE OF INVENTION: PRODUCTS

FILE REFERENCE: PP-16758.001/201130.408

CURRENT APPLICATION NUMBER: US/10/060,765

CURRENT FILING DATE: 2002-01-29

PRIOR APPLICATION NUMBER: US/09/715,805

NUMBER OF SEQ ID NOS: 17

SOFTWARE: FASTERED FOR Windows Version 4.0

SEQ ID NO 8
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100.0%; Pred. No. 1.3e-05;
ive 0; Mismatches 0;
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US-10-218-631-78
US-10-2320-641-78
US-10-232-224-78
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US-10-219-466-78
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US-10-219-524-78
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US-10-227-881-78
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US-10-818-140-8
; Sequence B, Application US/10818140
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Best Local Similarity 100.
Matches 15; Conservative
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  ; ORGANISM: Homo sapiens
US-10-060-765-8
    LENGTH: 15
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Sequence 54, Appl
Sequence 2, Appli
Sequence 78, Appl
Sequence 78, Appl
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Sequence 8, Appli
Sequence 8, Appli
Sequence 36, Appl
Sequence 36, Appl
Sequence 33, Appl
                                                                                              July 8, 2005, 22:18:21; Search time 17:875 Seconds (without alignments) 324:193 Million cell updates/sec
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                 GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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5 US-10-818-140-8

7 US-10-71-173-8

US-09-801-968-36

US-09-801-968-36

US-09-901-938-33

4 US-10-938-33

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US-10-755-695-2
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US-10-230-163-78
                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                          1726216 segs, 386330316 residues
                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                      protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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seq length: 200000000
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Length 15; Indels

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LENGTH: 68
TYPE: PRT
ORGANISM: Homo sapiens
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SEO ID NO 36
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US-10-771-173-8
Sequence 8, Application US/10771173
Sequence 8, Application US/10771173
Sequence 8, Application US/10771173
Sequence 8, Application No. US20050037457A1
GRNERAL INFORMATION:
APPLICAMT: Itch, Nobuyuki
SPLICAMT: Itch, Nobuyuki
TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
TITLE OF INVENTION: HOWAN FGF-21 GENE AND GENE EXPRESSION
TITLE OF INVENTION: HOWAN FGP-101/201130.408
CURRENT APPLICATION NUMBER: US/10/771,173
CURRENT PILING DATE: 2004-02-03
PRIOR PILING DATE: 2000-11-16
NUMBER OF SEQ ID NOS: 17
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8
LENGTH: 15
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; Patent No. US20020082205A1
; GENERAL INPORMATION:
; APPLICANT: Kavanaugh, W. Michael
; TITLE OF INVENTION: HUMAN FGF-23 GENE AND GENE EXPRESSION
; TITLE OF INVENTION: PRODUCTS
; FILE REPERENCE: PP-1150.001/201130.40901
; CURRENT APPLICATION NUMBER: US/09/801,968
; CURRENT FILING DATE: 2001-03-07
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PastSEQ for Windows Version 4.0
                       GENERAL INFORMATION:
APPLICANT: Itch, Nobuyuki
APPLICANT: Itch, Nobuyuki
TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
TITLE OF INVENTION: HUMAN FGF-31 GENE AND GENE EXPRESSION
TITLE OF INVENTION: HUMAN FGF-31 GENE AND GENE EXPRESSION
TITLE OF INVENTION: HUMAN FGF-31 GENE AND GENE EXPRESSION
TITLE OF INVENTION: HUMAN FGF-31 GENE AND GENE EXPRESSION
TITLE OF INVENTION: HUMAN FGF-31 GENE AND GENE EXPRESSION
CURRENT APPLICATION NUMBER: US/10/818,140
FRIOR APPLICATION NUMBER: US/09/715,805
FRIOR FILING DATE: 2004-04-05
NUMBER OF SEQ ID NOS: 17
SEQ
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Pred. No. 1.3e-05;
Mismatches 0; Indels
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Pred. No. 1.3e-05;
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Best Local Similarity 100.0%;
Matches 15; Conservative 0;
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Publication No. US20040185494A1
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Best Local Similarity 100.
Matches 15; Conservative
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; ORGANISM: Homo sapiens
US-10-771-173-8
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ORGANISM: Homo sapiens
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Sequence 33, Application US/09901938

Sequence 33, Application US/09901938

Patent No. US20020156001A1

GENERAL INFORMATION:

APPLICANT: WHITE, Kenneth

APPLICANT: STROM, Thomas

APPLICANT: STROM, Thomas

TITLE OF INVENTION: NOVEL FIBROBLAST GROWTH FACTOR (FGF23) AND METHODS FOR USE

FILE REFERENCE: 053864-5001,

CURRENT APPLICATION NUMBER: US/09/901,938

CURRENT FILING DATE: 2001-07-10

PRIOR FILING DATE: 2000-07-19

NUMBER OF SEQ ID NOS: 34

SOFTWARE: PatentIn version 3.0

SEQ ID NO 33

LENGTH: 136
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Sequence 36, Application US/09802154

Publication No. US20030105302A1

GENERAL INFORMATION:

APPLICANT: Itoh, No. US20030105302Aluyuki

APPLICANT: Kavanaudh, W. Michael

TITLE OF INVENTION: HUMAN FGF-23 GENE AND GENE EXPRESSION

TITLE OF INVENTION: PRODUCTS

FILE REFERENCE: PP-17149.001/201130.409

CURRENT APPLICATION NUMBER: US/09/802,154

CURRENT FILING DATE: 2001-03-07

NUMBER OF SEQ ID NOS: 46

SOUTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 36

LENGTH: 68
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  Length 68;
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Query Match 100.0%; Score 89; DB 9; I
Best Local Similarity 100.0%; Pred. No. 5.6e-05;
Matches 15; Conservative 0; Mismatches 0;
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100.0%; Pred. No. 5.6e-05;
tive 0; Mismatches 0;
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Best Local Similarity 100.0
Matches 15, Conservative
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US-09-901-938-33
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US-09-802-154-36
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APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Paul J.
APPLICANT: Goddard, Paul J.
APPLICANT: Goddard, Austin L.
APPLICANT: Gurney, Austin L.
APPLICANT: Gurney, Austin L.
APPLICANT: Saith, Victoria
APPLICANT: Sathh, Victoria
APPLICANT: Matanabe, Colin L.
APPLICANT: Matanabe, Colin L.
APPLICANT: Matanabe, Colin L.
APPLICANT: MATANION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE OF INVENTION: ACIDS ENCODING THE SAME
FILE OF INVENTION: ACIDS ENCODING THE SAME
FILE OF INVENTION NUMBER: US/10/227, 884
FRIOR APPLICATION NUMBER: 10/119,480
FRIOR FILING DATE: 2002-04-09
FRIOR PILING DATE: 1997-09-17
FRIOR APPLICATION NUMBER: 60/062287
FRIOR APPLICATION NUMBER: 60/063249
FRIOR FILING DATE: 1997-10-28
FRIOR APPLICATION NUMBER: 60/06349
FRIOR FILING DATE: 1997-10-28
FRIOR FILING DATE: 1997-10-28
FRIOR FILING DATE: 1997-10-31
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                                                                                    Score 89; DB 17; Length 183;
Pred. No. 0.00015;
Mismatches 0; Indels (
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APPLICANT: CONKIN, Darrell C.
APPLICANT: CONKIN, Darrell C.
TITLE OF INVENTION: NOVEL FGF HOWOLOG ZFGF11
FILE REFERENCE: 00-03
CURRENT PILING DATE: 2001-05-11
PRIOR PILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PASELSEQ for Windows Version 4.0
SEQ ID NO 2
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Publication No. US20030027988A1
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Patent No. US20020081663A1
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                                                                                       Query Match
Best Local Similarity 100.0%;
Matches 15; Conservative 0
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Best Local Similarity 100.
Matches 15; Conservative
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Gerritsen, Mary
   ; ORGANISM: Homo sapiens
US-10-659-004-54
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CRGANISM: Homo sapiens
US-09-755-695-2
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TITLES OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOD
FILE REFERENCE: 21402-609
FULE REFERENCE: 21402-609
CURRENT APPLICATION NUMBER: 60/295,607
PRIOR APPLICATION NUMBER: 60/295,607
PRIOR APPLICATION NUMBER: 60/295,601
PRIOR PELING DATE: 2001-06-04
PRIOR PILING DATE: 2001-06-04
PRIOR PILING DATE: 2001-06-06
PRIOR APPLICATION NUMBER: 60/295,611
PRIOR APPLICATION NUMBER: 60/295,414
PRIOR PILING DATE: 2001-06-06
PRIOR PILING DATE: 2001-06-01
PRIOR PILING DATE: 2001-06-11
PRIOR PILING DATE: 2001-06-11
PRIOR PILING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-15
PRIOR PELING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-26
PRIOR PILING DATE: 2001-06-21
                                                                                                                                  Sequence 33, Application US/10379334

Publication No. US20030181379A1

GENERAL INFORMATION:

APPLICANT: ECRNS, Michael

APPLICANT: STROW, Tim

APPLICANT: STROW, Tim

APPLICANT: BTROW Tim

APPLICANT: BTROW Tim

APPLICANT: BREEKENGE: 053884-5001

CURRENT APPLICATION NUMBER: US/10/379,334

CURRENT PILING DATE: 2003-03-04

PRIOR PILING DATE: 2003-03-04

PRIOR FILING DATE: 2000-07-19

PRIOR FILING DATE: 2000-07-19

NUMBER OF SEQ ID NOS: 34

SOFTWARE: Patentin version 3.0

SEQ ID NO 33

LENGTH: 136
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100.0%; Score 89; DB 14; Length 136;
Best Local Similarity 100.0%; Pred. No. 0.00011;
Matches 15; Conservative 0; Mismatches 0; Indels
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; Sequence 54, Application US/10659004
; Publication No. US20050048507A1
; GENERAL INFORMATION:
107 HLPGNKSPHRDPAPR 121
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; ORGANISM: Homo Sapiens
US-10-379-334-33
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LENGTH: 183
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PRIOR APPLICATION NUMBER: 60/10019
PRIOR PLING DATE: 1998-09-18
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PRIOR FILING DATE: 1998-04-15
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PRIOR APPLICATION NUMBER: 60/08195
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PRIOR FILING DATE: 1998-04-15
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PRIOR APPLICATION NUMBER: 60/08532
PRIOR PELING DATE: 1998-05-13
PRIOR PILING DATE: 1998-05-13
PRIOR PILING DATE: 1998-06-17
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R APPLICATION NUMBER: 60/095318
R FILING DATE: 1998-08-04
R APPLICATION NUMBER: 60/095916
TITING DATE: 1998-08-10
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PILING DATE: 1998-09-10
APPLICATION NUMBER: 60/099816
FILING DATE: 1998-09-10
APPLICATION NUMBER: 60/100038
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APPLICATION NUMBER: 60/100385
FILING DATE: 1998-09-15
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FILING DATE: 1998-09-15
APPLICATION NUMBER: 60/100627
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APPLICATION NUMBER: 60/099803
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FILING DATE: 1998-09-10
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FILING DATE: 1998-09-17
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FILING DATE: 1998-09-23
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APPLICANT: Shith, Victoria
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Watanabe, Colin L.
APPLICANT: Watanabe, Colin L.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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CURRENT PILING DATE: 2002-08-28
PRIOR PELICATION NUMBER: US/10/230,163
PRIOR PILING DATE: 2002-04-09
PRIOR PILING DATE: 2002-04-09
PRIOR PILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
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PRIOR PILING DATE: 1997-10-31
PRIOR PILING DATE: 1997-10-31
PRIOR PILING DATE: 1997-10-31
PRIOR PILING DATE: 1997-11-31
PRIOR PILING DATE: 1997-12-17
PRIOR PILING DATE: 1997-12-17
PRIOR PILING DATE: 1997-12-17
PRIOR PILING DATE: 1998-03-20
PRIOR FILING DATE: 1999-06-23
PRIOR APPLICATION NUMBER: 60/144758
PRIOR APPLICATION NUMBER: 60/145698
PRIOR PLING DATE: 1999-07-26
PRIOR PLING DATE: 1999-07-26
PRIOR PLING DATE: 1999-07-26
PRIOR PLING DATE: 1999-07-28
PRIOR PLING DATE: 1999-08-03
PRIOR APPLICATION NUMBER: 60/146953
PRIOR APPLICATION NUMBER: 60/149320
PRIOR PLING DATE: 1999-08-17
PRIOR PLING DATE: 1999-11-09
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PRIOR PLING DATE: 1999-11-06
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Grimaldi, J. Christopher
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Sequence 78, Application US/10230163
Publication No. US20030036635A1
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APPLICATION NUMBER: 60/079294
PILING DATE: 1998-03-25
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R APPLICATION NUMBER: 60/12575

R FILING DATE: 1999-03-23

R APPLICATION NUMBER: 60/126773

R APPLICATION NUMBER: 60/127887

R APPLICATION NUMBER: 60/127887

R FILING DATE: 1999-04-05

R FILING DATE: 1999-04-21

R FILING DATE: 1999-04-21

R FILING DATE: 1999-04-26

R FILING DATE: 1999-04-26

R APPLICATION NUMBER: 60/131220
                                                                                                                                                              R FILING DATE: 1998-09-24
R APPLICATION NUMBER: 60/101922
R FILING DATE: 1998-09-24
R FILING DATE: 1998-09-24
R FILING DATE: 1998-10-28
R APPLICATION NUMBER: 60/106248
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APPLICATION NUMBER: 60/131291
FILING DATE: 1999-04-27
APPLICATION NUMBER: 60/131445
FILING DATE: 1999-04-28
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FILING DATE: 1998-12-15
APPLICATION NUMBER: 60/113296
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APPLICATION NUMBER: 60/113605
FILING DATE: 1998-12-23
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APPLICATION NUMBER: 60/119549
FILING DATE: 1999-02-10
APPLICATION NUMBER: 60/123618
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APPLICATION NUMBER: 60/125259
FILING DATE: 1999-03-19
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FILING DATE: 1998-10-30
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FILING DATE: 1998-12-23
PPLICATION NUMBER: 60/115558
FILING DATE: 1999-01-12
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FILING DATE: 1998-09-25
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FILING DATE: 1998-11-03
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FILING DATE: 1998-11-17
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                                                    FILING DATE: 1998-09-24
PRIOR PRIOR
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APPLICANT: Baker, Kevin P.
APPLICANT: Baker, Kevin P.
APPLICANT: Besnoyers, Luc
APPLICANT: Gerriteen, Mary
APPLICANT: Godowski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Gurney, Austin L.
APPLICANT: Smith, Victoria L.
APPLICANT: Smith, Victoria L.
APPLICANT: Smith, Victoria L.
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Watanabe, Colin L.
APPLICANT: Wood, William I.
TITLE OF INVENTION: ACIDS ENCODING THE SAME
TITLE OF INVENTION: ACIDS ENCODING THE SAME
TITLE OF INVENTION NUMBER: US/10/230,338
CURRENT APPLICATION NUMBER: US/10/230,338 CURKENT FILING DATE: 2002-00-28

FRIOR APPLICATION NUMBER: 10/119,480

PRIOR APPLICATION NUMBER: 60/059113

PRIOR APPLICATION NUMBER: 60/06287

PRIOR APPLICATION NUMBER: 60/06287

PRIOR FILING DATE: 1997-10-17

PRIOR FILING DATE: 1997-10-28

PRIOR FILING DATE: 1997-10-28

PRIOR FILING DATE: 1997-10-31

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PRIOR FILING DATE: 1997-12-17

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PRIOR FILING DATE: 1998-03-20

PRIOR FILING DATE: 1998-03-26

PRIOR FILING DATE: 1998-03-27

REMEDIATE: 1998-03-27

REMEDIATE: 208

LENGTH: 208 Gaps ; 0 Indels Score 89; DB 14; Pred. No. 0.00017; 0; Mismatches PRIOR APPLICATION NUMBER: 60/149320
PRIOR FILING DATE: 1999-08-17
PRIOR PELING DATE: 1999-08-17
PRIOR PILING DATE: 1999-08-17
PRIOR PILING DATE: 1999-08-17
PRIOR PILING DATE: 1999-13-18
PRIOR PILING DATE: 1999-11-09
PRIOR PILING DATE: 1999-11-09
PRIOR PILING DATE: 1999-11-06
PRIOR APPLICATION NUMBER: 60/166361
PRIOR APPLICATION NUMBER: 60/16945
PRIOR APPLICATION NUMBER: 60/16945
PRIOR PELING DATE: 1999-12-07
PRIOR PELING DATE: 1999-12-07
PRIOR PELING DATE: 1999-12-07
PRIOR PELING DATE: 1999-12-07
PRIOR PILING DATE: 1999-12-07 RESULT 12
US-10-230-338-78
; Sequence 78, Application US/10230338
; Publication No. US20030044934A1
; GENERAL INFORMATION: Query Match 100.0%; Best Local Similarity 100.0%; Matches 15; Conservative 0 144 HLPGNKSPHRDPAPR 158 1 HLPGNKSPHRDPAPR 15 LING DATE: 1999-08-03 ò 셤

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APPLICANT: WAGAGA, WALLIAM L.

APPLICANT: WAGAGA, WALLIAM L.

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

TITLE OF INVENTION: ACIDS ENCODING THE SAME
TITLE OF INVENTION: ACIDS ENCODING THE SAME
CURRENT APPLICATION NUMBER: US/10/230,414

CURRENT PILING DATE: 2002-08-28

PRIOR PAPLICATION NUMBER: 60/059113

PRIOR PAPLICATION NUMBER: 60/06349

PRIOR PILING DATE: 1997-01-7

PRIOR APPLICATION NUMBER: 60/06349

PRIOR PILING DATE: 1997-10-17

PRIOR PILING DATE: 1997-10-31

PRIOR PILING DATE: 1997-10-31

PRIOR PILING DATE: 1997-12-17

PRIOR PILING DATE: 1998-03-26

PRIOR PILING DATE: 1998-03-25

PRIOR PILING DATE: 1998-03-26

PRIOR PILING DATE: 1998-03-26
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Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Smith, Victoria
Stephan, Jean-Philippe F.
Watanabe, Colin L.
                                                                                                                                                                                                                               Stephan, Jean-Philippe F. Watanabe, Colin L. Wood, William I.
                                                                                                                                                     Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Smith, Victoria
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                          US20030050448A
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Gerritsen, Mary
Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
Matches 15; Conservative
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APPLICANT: Desnoyers, Luc
APPLICANT: Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
CORGANISM: Homo Sapien
US-10-230-414-78
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APPLICANT:
APPLICANT:
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APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Smith, Victoria
APPLICANT: Smith, Victoria
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Wood, William I.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECERTED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLBIC TITLE OF INVENTION: ACIDS ENCODING THE SAME
                                                                                                                                 Gaps
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                                                                                     Score 89; DB 14; Length 208; Pred. No. 0.00017;
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100.0%; Score 89; DB
Best Local Similarity 100.0%; Pred. No. 0.0
Matches 15; Conservative 0; Mismatches
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APPLICANT: Baker, Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Scc
100.0%; Pre
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Gerritsen, Mary
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Best Local Similarity 100.0
Matches 15; Conservative
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-230-338-78
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ORGANISM: Homo Sapien
US-10-218-631-78
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Gaps

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Indels

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

RESULT 14 US-10-230-414-78

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| TITLE OF INVENTION: ACIDS ENCODING THE SAME
| FILE REFERENCE: P3530PCI11
| CURRENT APPLICATION NUMBER: 05/0/32,224
| CURRENT FILING DATE: 2002-08-29
| FRIOR PELICATION NUMBER: 10/19,480
| FRIOR FILING DATE: 1997-09-17
| FRIOR FILING DATE: 1997-09-17
| FRIOR FILING DATE: 1997-09-17
| FRIOR FILING DATE: 1997-10-31
| FRIOR FILING DATE: 1999-0-3-20
| FRIOR FILING DATE: 1998-0-3-20
| FRIOR APPLICATION NUMBER: 60/079914
| FRIOR FILING DATE: 1998-0-3-26
| FRIOR PAPLICATION NUMBER: 60/079914
| FRIOR FILING DATE: 1998-0-3-26
| FRIOR FILING DATE: 1998-0-3-27
| Remaining Prior Application data removed - See File Wrapper or PALM.
| SEQ ID NO 78
| LENGTH: 208
| TYPE: FRT | ORGANISM Homo Sapien | TYPE: FRT | ORGANISM Homo Sapien | US-10-232-224-78
| Gherry Match | Good File Matches | 15; Conservative | 0; Mismatches | 0; Indels | 0; Gaps | 0; Matches | 15; Conservative | 0; Mismatches | 0; Indels | 0; Gaps | 0;
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Db 144 HLPGNKSPHRDPAPR 158

1 HLPGNKSPHRDPAPR 15

Search completed: July 8, 2005, 22:44:50 Job time : 17.875 secs

us-10-060-765-8.rai

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Sequence 4, Appli
Sequence 31822, A
Sequence 22856, A
Sequence 29952, A
Sequence 21588, A
Sequence 25664, A
Sequence 35161, A
Sequence 3048, A
Sequence 3048, A
Sequence 3048, A
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                                                                                                               July 8, 2005, 22:04:53; Search time 5.0625 Seconds (without alignments) 221.182 Million cell updates/sec
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Sequence 3, 1
Sequence 3271
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Sequence 2,
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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
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/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd
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US-09-252-991A-31822
US-09-252-991A-18109
US-09-252-991A-29952
US-09-252-991A-29952
US-09-252-991A-21588
US-09-270-767-35161
US-09-270-767-35161
US-09-252-991A-35648
US-09-252-991A-3280
US-09-252-991A-24335
US-09-252-991A-24335
US-09-252-991A-24335
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US-09-252-991A-32717
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Maximum Match 100%
Listing first 45 summaries
                                                                                OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Match Length DB
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89
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                                                                                                                        Run on:
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No.
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US-08-426-279-22 US-08-426-279-24 US-08-401-011-22 US-08-401-013-24 US-08-426-570-22 US-08-426-570-24 US-08-426-243-22 US-08-426-243-24 US-08-426-243-24 US-08-401-632-24 US-08-401-632-24 US-08-401-632-24 US-08-252-991A-26118 US-09-252-991A-26118 US-09-252-991A-26571 US-09-252-991A-26571 US-09-252-991A-26571	ALIGNMENTS	ULT 1  09-715-805-8  equence 8, Application US/09715805  equence 8, Application US/09715805  attent No. 6716626  APPLICANT: Itoh, No. 6716626  APPLICANT: Kavanaugh, W. Michael  TITLE OF INVENTION: HUWAN FGF-21 GENE AND GENE EXPRESSION  TITLE OF INVENTION: PRODUCTS  FILE REPERENCE: PP-16758 001/201130.408  CURRENT APPLICATION NUMBER: US/09/715,805  CURRENT PILING DATE: 2000-11-16  NUMBER OF SEQ ID NOS: 17  SOFTWARE: FastSEQ for Windows Version 4.0  EQ ID NO 8  LENGTH: 15  TYPE: PRT  OKCANISM: Homo sapiens	Score 89; DB 4; Pred. No. 4.8e-07; 0; Mismatches 0;		ULT 2  '09-390-207-5  'sequence 5, Application US/09390207  'attent No. 6504530  BENERAL INFORMATION:  APPLICANT: Into Benxian  APPLICANT: Liu, Benxian  APPLICANT: Liu, Benxian  APPLICANT: Liu, Benxian  TITLE OF INVENTION: Fibroblast Growth Factor-Like Polypeptides  FILE REFERENCE: 99-371  FULE REFERENCE: 99-371  CURRENT APPLICATION UNMBER: US/09/390,207  CURRENT PILING DATE: 1999-09-07  SOUTHARE: Patentin Ver. 2.0  SOFTWARE: Patentin Ver. 2.0  TYPE: PRT  ORGANISM: Homo sapiens  09-390-207-5
		SULT 1 Sequence 8, Application US/09715805 Sequence 8, Application US/09715805 Patent No. 6716626 APPLICANT: Itch, No. 6716626uyuki APPLICANT: Itch, No. 6716626uyuki APPLICANT: Kavanaudh, W. Michael TITLE OF INVENTION: PRODUCTS FILE REPRENCE: PP-16758.001/201130 CURRENT APPLICATION NUMBER: US/09/7 CURRENT APPLICATION NUMBER: US/09/7 CURRENT FILING DATE: 2000-11-16 NUMBER OF SEQ ID NOS: 17 SEQ ID NO 8 LENGTH: 15 TYPE: PRT TYPE: PRT TYPE: PRT TYPE: PRT ORGANISM: Homo Bapiens	100.0%; larity 100.0%; Conservative	HRDPAPR 15         HRDPAPR 15	5. Application US/09390207 5. Application US/09390207 6. 6504530 TT. Thomason, Arlen TT. Liu, Benxian TT. Liu, Benxian TRENCE: 99-371 APPLICATION WHBER: US/09/ FILING DATE: 1999-09-07 FILING DATE: 1999-09-07 FILING DATE: 1999-09-07 FILING DATE: 1998-09-07 FILING DATE: 1998-09-09-07 FILING DATE: 1998-09-09-07 FILING DATE: 1998-09-09-07 FILING DATE: 1998-09-09-09-09-09-09-09-09-09-09-09-09-09-
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		Application 73716626 For 16626 For 1	뎔	HLPGNKSPHRDPAPR              HLPGNKSPHRDPAPR	SAPPlicat SG4530 RWATION: TRAMATON: TAL, Ben VENTION: VENTION: TOCS: 199- TICE: 199- TICE: 190- TICE: 190- TIC
च च च च च च च च च च च च च ח M M M M M M		Sequence 8, Application Patent No. 671656 GENERAL INFORMATION: APPLICANT: Itch, No. APPLICANT: Itch, No. APPLICANT: Itch, No. APPLICANT: OF INVENTION: ITILE OF INVENTION: FILE REPERENCE: PP-16 CURRENT APPLICATION OF THE REPERENCE: PP-16 CURRENT APPLICATION OF CURRENT APPLICATION NOT SOFTWARE: PastSEQ for SEQ ID NO 8 LENGTH: 15 TYPE: PRI TYPE: PRI TYPE: PRI ONCANIEM: Homo sapie. OKGANIEM: Homo sapie.	Query Match Best Local Si Matches 15;		SULT 2 Sequence 5, Application Patent No. 6504530 GENERAL INFORMATION: APPLICANT: Thomason, Ar APPLICANT: Liu, Benxian TITLE OF INVENTION: Fib FILE REFERENCE: 99-371 CURRENT APPLICATION NUM CURRENT PELLORION NOS: 4 SOCTWARE: PATENTIN VET. SEQ ID NO 5 LENGTH: 181 TYPE: PRT ORGANISM: HOMO SAPIENS -09-390-207-5
		RESULT 1 US-09-711 Sequent Sequent GENERAL APPLIC TITLE TITLE TITLE TITLE CURRE CURRE NUMBES SEQ ID SEQ ID SEQ ID LENG LENG CORCE NUMBES NUMBE	Quer Best Matcl	B &	RESULT 2 US-09-390-; Sequence; Patent NG; GENERAL; APPLICAL; TITLE OB; TITLE REICURRENT; CURRENT; NUMBER ( SOFTWARE) SEQ ID NG; SEQ ID NG; TYPE ( SOFTWARE) TYPE ( TYPE) US-09-390-3
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Score 89; DB 4; Length 181; Pred. No. 6.9e-06;

100.0%;

Query Match Best Local Similarity

Sequence 22, Appl Sequence 24, Appl

US-09-252-991A-23226 US-09-252-911A-27502 US-09-489-039A-8325 US-07-999-280A-22 US-07-999-280A-24

Sequence Sequence Sequence Sequence

Gaps

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JENCHAL 18109

1. Sequence 18109, Application US/09252991A

1. Patent No. 6551795

2. GENERAL INFORMATION:
2. TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS

2. TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

3. TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

4. CURRENT APPLICATION NUMBER: US/09/252,991A

5. CURRENT FILING DATE: 1998-02-18

6. PRIOR PFLING DATE: 1998-02-18

7. PRIOR FILING DATE: 1998-07-27

8. NUMBER OF SEQ ID NOS: 33142

7. ERNOTH: 187

8. ERNOTH: 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: ABRUGINOSA FOR DIAGNOSTICS AND THERAFEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT PILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 22856
                                                                                                                                                                                                                                                                                               DB 4; Length 1419;
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58.8%; Pred. No. 2.1;
tive 0; Mismatches
; CURRENT APPLICATION NUMBER: US/09/252,991A; CURRENT FILING DATE: 1999-02-18; PRIOR APPLICATION NUMBER: US 60/074,788; PRIOR FILING DATE: 1998-02-18; PRIOR APPLICATION NUMBER: US 60/094,190; PRIOR FILING DATE: 1998-07-27; NUMBER OF SEQ ID NOS: 33142; SEQ ID NO 31822; LENGTH: 1419
                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                               64.0%; Score 57;
66.7%; Pred. No.
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ORGANISM: Pseudomonas aeruginosa
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Best Local Similarity 66.79
Watches 10; Conservative
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                                                                                                                                                                                                          TYPE: PRT
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Patent No. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
ATITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
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APPLICANT: Thomason, Arlen
APPLICANT: Thomason, Arlen
APPLICANT: Thomason, Arlen
TITLE OF INVENTION: Elbroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 99-371
CURRENT APPLICATION NUMBER: US/09/390,207
NUMBER OF SEQ ID NOS: 41
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 209
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         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
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APPLICANT: Itch, No. 6716626uyuki
APPLICANT: Kavanaugh, W. Michael
TITLE OF INVENTION: HUMAN FGF-21 GENE AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS
FILE REFERENCE: PP-16758.001/201130.408
CURRENT APPLICATION NUMBER: US/09/715,805
CURRENT FILING DATE: 2000-11-16
NUMBER OF SEQ ID NOS: 17
SOFTWARE: FASELSEQ for Windows Version 4.0
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Pred. No. 8.1e-06;
         Mismatches
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; Sequence 2, Application US/09390207
; Patent No. 6504530
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Patent No. 6716626
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Best Local Similarity 100.
Matches 15; Conservative
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Best Local Similarity 100.
Matches 15; Conservative
         15; Conservative
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; ORGANISM: Homo sapiens
US-09-715-805-4
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; ORGANISM: Homo sapiens
US-09-390-207-2
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US-09-252-991A-31822
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GENERAL INFORMATION:

APPLICANT: MARC J. Rubenfield et al.

APPLICANT: MARC J. Rubenfield et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 107196.136

CURRENT APPLICATION NUMBER: US 60/074,788

PRIOR APPLICATION NUMBER: US 60/074,788

PRIOR PILING DATE: 1998-02-18

PRIOR PILING DATE: 1998-02-18

NUMBER OF SEQ ID NOS: 33142

SEQ ID NO 25664
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Sequence 35161, Application US/09270767

Sequence 35161, Application US/09270767

Sequence 35161, Application US/09270767

GENERAL INFORMATION:

APPLICANT: Homburger et al.

TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REPRENCE: File Reference: 7326-094

CURRENT APPLICATION NUMBER: US/09/270,767

CURRENT PILING DATE: 1999-03-17

SOFTWARE: PatentIN Ver. 2.0

SEQ ID NO 35161

LENGTH: 392
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GENERAL INCORMATION:

APPLICANT: Homburger et al.

TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REFERENCE: FILE REFERENCE: FILE REFERENCE: FILE REFERENCE: FILE REFERENCE: FILE REPERENCE: FILE REPERENCE: PARTIE 1999-03-17

CURRENT FILING DATE: 1999-03-17

NUMBER OF SEQ ID NOS: 62517

SOFTWARE: PATENTIN Ver. 2.0

SEQ ID NO 50378
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31;
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Pred. No. 37;
2; Mismatches
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                                           Sequence 2564, Application US/09252991A Patent No. 6551795
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US-09-270-767-50378
Sequence 50378, Application US/09270767
; Patent No. 6703491
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Best Local Similarity 66.7%;
Matches 8; Conservative
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Best Local Similarity
7; Conserva
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Faceuce 29952, Application US/09252991A

Faceuce No. 6551795

GENERAL INFORMATION:

FAPLICATION:

MUCLBIC ACID AMD AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS

TITLE OF INVENTION:

TITLE OF INVENTION:

ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

FILE REPRERENCE:

FURBERT APPLICATION NUMBER: US/09/252,991A

CURRENT FILING DATE: 1999-02-18

FRIOR PELING DATE: 1999-02-18

FRIOR PILING DATE: 1998-02-18

FRIOR PILING DATE: 1998-02-18

FRIOR FILING DATE: 1998-07-27

NUMBER OF SEQ ID NOS: 33142

SEQ ID NO 29952
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TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR PILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 21588
LENGTH: 307
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                                             Score 51; DB 4; Length 187;
Pred. No. 3.1;
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Pred. No. 29;
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                                           Query Match 57.3%; Score 51; DB Best Local Similarity 57.1%; Pred. No. 3.1; Matches 8; Conservative 1; Mismatches
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Patent No. 6551795
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ORGANISM: Pseudomonas aeruginosa
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Best Local Similarity 61.5%;
Matches 8; Conservative
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89 HRPGRRHPRHDPAP 102
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Best Local Similarity 53.33
Matches 8; Conservative
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US-09-252-991A-18109
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RESULT 15
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Sequence 23280, Application US/09252991A
Fatent No. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT PILING DATE: 1999-02-18
FRIOR APPLICATION NUMBER: US 60/074,788
FRIOR APPLICATION NUMBER: US 60/094,190
FRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 23280
LENGTH: 601
                                                                                                                                                                                                                                                                                                                                                                                           Sequence 30648, Application US/09252991A
Patent No. 6551795
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION NUMBER: US/09/252,991A
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1999-02-18
PRIOR FILING DATE: 1999-02-18
PRIOR FILING DATE: 1999-07-17
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Pred. No. 37;
2; Mismatches 2; Indels
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                                                                                ) OTHER INFORMATION: Xaa means any amino acid
US-09-270-767-50378
                TYPE: PRT
ORGANISM: Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-30648
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Best Local Similarity 66.7%;
Matches 8; Conservative
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SEQ ID NO 30648
LENGTH: 209
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303 LPGNRWPYRGPA 314
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Matches 7; Conservative
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81 PGGRATHPDPAP 92
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US-09-252-991A-23280
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LENGTH: 392
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Sequence 24.215, Application US/09252991A
Patent No. 6551795
GENERAL INFORMATION:
TITLE OF INVENTION: WUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION NUMBER: US 60/074,788
FRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR PILING DATE: 1998-07-18
PRIOR PILING DATE: 1998-07-27
WUMBER OF SEQ ID NOS: 33142
SEQ ID NO 24235
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Job time : 6.0625 secs
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1 HLPGNKSPHRDPAPR 15
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8, 2005, 21:53:57; Search time 273.442 Seconds (without alignments) 295.613 Million cell updates/sec July Run on:

Perfect score:

US-10-060-765-4 1113 1 MDSDETGFEHSGLWVSVLAG......SSDFLSMVGFSQGRSFSYAS 209 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

2105692 seqs, 386760381 residues Searched:

2105692 Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 200000000 Minimum DB & Maximum DB &

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

geneseqp1980s:* geneseqp1990s:* geneseqp2000s:* geneseqp2001s:* geneseqp2003as:* geneseqp2003as:* A_Geneseq_16Dec04:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

geneseqp2004s:*

### SUMMARIES

Description	Aag65667 Human fib	Aab68417 Amino aci	Aau79289 Human FGF	Aae18826 Human FGF	6 Human	7 Human	Adl57121 Human NOV	Ad157125 Human NOV	Adl57123 Human NOV	Adl57127 Human NOV	Human	Aab82351 Human JAF	Aau00957 Human Fib	1 Amino	1 Human	Ad157113 Human NOV	Human	Aae05078 Human fib	Aau83630 Human PRO	Abg32358 Human fib	Aae17601 Human ext	Abu80777 Human PRO	Abo33743 Novel hum	Abu82086 Novel hum	Abp96156 Human fib
OI E	1 AAG65667	I AAB68417	5 AAU79289	5 AAE18826	3 ADM94766	3 ADL57117	3 ADL57121	3 ADL57125	3 ADL57123	3 ADLS7127	3 ADL57129	I AAB82351	l AAU00957	AAB83951	3 ADL57111	3 ADL57113	3 ADL57119	4 AAE05078	5 AAU83630	5 ABG32358	5 AAE17601	5 ABU80777	5 ABO33743	3 ABU82086	3 ABP96156
* Query Match Length DB	209	209	209	209	209	209	209	309	209	209	209	209	209	209	209	209	209	208	208	208	208	208	208	208	208
% Query Match	100.0	100.0	100.0	100.0	100.0	9.66	9.66	99.6	99.2	99.2	99.2	99.4	99.4	99.4	99.4	99.4	99.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
Score	1113	1113	1113	1113	1113	1109	1109	1108	1107	1107	1107	1106	1106	1106	1106	1106	1106	1098.5	1098.5	1098.5	1098.5	1098.5	1098.5	1098.5	1098.5
Result No.	-	7	m	4	S	9	7	80	σ	10	. 11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

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24444 2722000000000000000000000000000000	45

# ALIGNMENTS

Fibroblast growth factor; FGF; FGF-like polypeptide; mitogenic; fat deposition; vulnerary; antiulcer; dermatological; anoretic; antidiabetic; antiinflammatory; cytostatic; hepatic; virucide; neuroprotectant; pulmonary; gene therapy; vaccine; human. Human fibroblast growth factor (FGF)-21. AAG65667 standard; protein; 209 AA. 07-JAN-2002 (first entry) AAG65667; AAG65667 

Homo sapiens.

WO200172957-A2.

04-OCT-2001.

02-APR-2001; 2001WO-IB000664.

31-MAR-2000; 2000US-00540118

(ITOH/) ITOH N.

Itoh N;

WPI; 2001-611623/70.

New human nucleic acid encoding fibroblast growth factor-like peptide, useful for treatment and diagnosis of e.g. wounds and inflammatory bowel disease.

Disclosure; Fig 3; 172pp; English.

The invention provides human nucleic acids encoding fibroblast growth factor (FGF)-like peptide. The FGF-like polypeptides can be expressed by standard recombinant methodology and are mitogenic for a wide range of cells, inducing differentiation and proliferation, and inhibiting deposition of fat. The FGF-like polypeptides, polynuclectides and apperition artibodies and modulators are useful for treating a very wide range of diseases and conditions, e.g. wounds, ulcers, skin aging, obesity, diabetes, alopecia, inflammatory bowel disease, emphysema, viral hepatitis, multiple sclerosis, respiratory distress syndrome, tumors of the eye, etc., also for maintaining organs before transplant and supporting culture of primary cells and tissues. Sequences AAG65647-67

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Query Match

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Matches

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61 LEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA 120
                                                                                                                                                                                                                                                            61 LEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A protein and a partial peptide of the protein useful for treating injuries, burns, thrombosis, arteriosclerosis, hepatopathy, pancreopathy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        useful as drugs for injuries, burns, thrombosis, arteriosclerosis, hepatopathy, pancreopathy and diabetes. This sequence represents a human FGF-related protein of the invention
                                                                                                                                                                                      to a protein and the polymucleotide encoding it,
                                                                                                                                                                                                                                         CSFRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGI
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                                                                                                                  1 MDSDETGFEHSGLWVSVLAGLLIGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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hepatopathy; FGF-related protein.
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                 Length 209;
                                                    Indels
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Pred. No. 6.2e-92;
               Score 1113; DB 4;
Pred. No. 6.2e-92;
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100.0%; Pred. No. 6.2
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               100.0%;
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03-AUG-2000; 2000JP-00240398.
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               Query Match
Best Local Similarity 100.
Matches 209; Conservative
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Matches 209; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fibroblast growth factor-21; FGF-21; cell growth; cell differentiation; hepatic cell; cirrhosis; infertility; impotence; testicular cancer; leukemia; lymphoma; autoimmune disease; thymus proliferative disorder.
                                                                                                                                                                         1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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                                                                                                              Gaps
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family
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                                                                       Length 209;
sequences of some members of the FGF
                                                                                                            Indels
                                                                      100.0%; Score 1113; DB 4;
100.0%; Pred. No. 6.2e-92;
ive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB68417 standard; protein; 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                impotence, or testicular cancer.
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11-MAY-2000; 2000US-0203633P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                              Conservative
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 represent amino acid
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N-PSDB; AAF85329.
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                                                                                           Local Similarity
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                                      Sequence 209 AA;
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RESULT 2 AAB68417 ID AAB

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The invention relates to fibroblast growth factor (FGF)-like polypeptides and nucleic acid molecules encoding such polypeptides. Sequences of the invention are useful for treating, preventing or ameliorating a medical condition. They are useful for treating dermal wounds, epidermolysis, bullosa, male pattern alopecia, gastric ulcer, duodenal ulcer, erosive agastriis, oseophaguis, inflammatory busel. Inflammatory bowel disease, Crohn's disease, radiation- or chemotherapy-induced gut toxicity, hyaline membrane disease, necrosis of the respiratory compilered by pulmonary fibroasis, chepatic cirrhosis, toxic insults to the liver, fulminant liver failure, viral hepatitis, mucositis, multiple sclerosis and other currhosis, toxic insults to the liver, fulminant liver failure, viral hepatitis, mucositis, multiple sclerosis and other contropulmonary dysplasia, acute respiratory distress syndrome or other bronchopulmonary dysplasia, acute respiratory distress syndrome or contropulmonary dysplasia, acute respiratory distress syndrome or contropulmonary dysplasia, eximilating angiogenesis, promoting wound healing, modulating differentiating or ameliorate skin aging, concentring hair loss, stimulating and maintaining organs before transplanteation and for supporting cultures of primary cells and tissues. Cransplanteation and for supporting cultures of primary cells and tissues. Sequences of the invention are also used in gene therapy and as vaccines.
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                                                                                                                              CSPRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGI
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                                                                                                                                                                                                                                                                                           LAPOPPDVGSSDPLSMVGPSQGRSPSYAS 209
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present sequence is human PGF-21 protein which is a member of the FGF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human; fibroblast growth factor; FGF; epidermolysis bullosa; chemchbrazpy-induced alopecia; male baldness; gastric ulcer; duodenal ulcer; stomach erosion; oesophagus erosion; enembrane inflammatory bowel disease; Crohn's disease; hyaline membrane disease;
                                                                                                                                                      1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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                                                                                                                                  1 MDSDRTGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQOTEAH
                                                                                                                                                                                                 LEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA
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                                                                          Score 1113; DB 5;
Pred. No. 6.2e-92;
Mismatches 0;
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thymic epithelial atrophy.
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02-APR-2001; 2001US-00822485.
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                                                                                        100.08;
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                                                                       Query Match
Best Local Similarity 100.
Matches 209; Conservative
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                                            209 AA;
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WPI; 2004-315567/29. N-PSDB; ADL57116.

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bowel disease such as Crohn's disease, hyaline membrane disease of premature infants, smoke inhalation, emphysema, hepatic cirrhosis and thymic epithelial atrophy. The nucleic acids may also be used to map locations of FGF-like gene and related genes on chromosomes. The present sequence represents a human FGF protein.
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                                                                                                                                  Length 209;
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                                                                                                                                  100.0%; Score 1113; DB 8;
100.0%; Pred. No. 6.2e-92;
ive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human NOV6e protein SEQ ID NO:62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-SEP-2002; 2002US-0409145P.
10-SEP-2002; 2002US-0409544P.
12-SEP-2002; 2002US-0411060P.
16-SEP-2002; 2002US-0411060P.
23-SEP-2002; 2002US-0412766P.
23-SEP-2002; 2002US-0412825P.
24-SEP-2002; 2002US-041382F.
25-SEP-2002; 2002US-0413342P.
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                                                                                                                                                                   Matches 209; Conservative
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                                                                                                                                    Query Match
Best Local Similarity
                                                                                                    Sequence 209 AA;
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                                                                                                                                                                                                                                 The invention relates to a novel isolated polypeptide (NOVX) comprising mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic,
                                                                              New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
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Pred. No. 1.4e-91;
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                                                                                                                                                                                               Claim 1; SEQ ID NO 62; 214pp; English.
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RESULT 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders, diabetes, obesity, infectious diseases (viral, bacterial, fungal, helminthic, and protozoal), anorexia, cancer, cardiovascular diseases (hypertension, atherosclerosis), neurodegenerative disorders, Alzheimer's disease, Parkinson's disease, epilepsy, immune disorders
                                                                                                                                                                                                                                                                                                                                                fibroblast growth factor receptor 4; FGFR4; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; alpha-2 macroglobulin-like polypeptide variant; antileukoproteinase I precursor; LIV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
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                                                                                                                                                                                                                                                             antiarteriosclerotic, anorectic, virucide, antibacterial; fungicide, protozoacide, noctropic, neuroproecetive, antiparkinsonian, anticonvulsant; osteopathic; antiarthritic; antiinflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy;
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                                                         ADL57121 standard; protein; 209 AA.
                                                                                                                                                                                          Human NOV6g protein SEQ ID NO:66.
                                                                                                                                                                                                                                        antidiabetic; anorectic;
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10-SEP-2002; 2002US-0409544P.
12-SEP-2002; 2002US-041030P.
16-SEP-2002; 2002US-0411060P.
23-SEP-2002; 2002US-0412766P.
23-SEP-2002; 2002US-0412825P.
24-SEP-2002; 2002US-0412767P.
25-SEP-2002; 2002US-0413342P.
30-SEP-2002; 2002US-0414832P.
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N-PSDB; ADL57120.
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                                                                                                     ADL57121;
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                  RESULT 7
                                         ADL57121
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Toberoatimitally, inseminatorpolate to the identification of small utboulders, and various dyslipidaemias. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibit e.g. neurogenesis, cell differentiation, cell proliferation, haematopoiesis, wound healing and angiogenesis, in gene therapy, in generation of antibodies that bind immunospecifically to Novx substances for use in therapeutic or diagnostic methods. The nucleic acids are further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The NoVX polypeptides of the invention show homology to certain known human proteins: NoVa-1t show homology to certain known human chochens: NoVa-1t show homology to certain known human chochens: NoVa-1t show homology to certain known human chochens: NoVa-1t show homology to certain known human chomology to matrix metalloproteinase-15 precursor; NoVa-6-6m show homology to fibroblast growth factor-21 (FGFR4); NoV7a-7c show homology to fibroblast growth factor-21 (FGF-21); NoV7a-7c show homology to antileukoproteinase 1 precursor; NOV9a-9; show homology to beta-necendorphin cransmembrane protein-11ke; NOV12a-12c show homology to beta-necendorphin cransmembrane protein-11ke; NOV12a-12c show homology to beta-necendorphin
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osteoarthritis), haematopoietic disorders,
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Best Local Similarity 99.5
Matches 208; Conservative
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1 MDSDETGFEHSGLWYSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH

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                                                                                                                                                                                                                                                                                                                                                                                        New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                                                                                                                                                                                                                                                                                                 Rieger DK;
                                                                                                                                                                                                                                                                                                 Padigaru M,
                                                                                                                                                                                                                                                                                                 Guo X, Anderson DW, Ort T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 70; 214pp; English.
                                                                                                        2002US-0410320P.
2002US-0411060P.
2002US-0412766P.
2002US-0412825P.
2002US-0413342P.
                                    09-SEP-2003; 2003WO-US028141
                                                                       2002US-0409145P.
2002US-0409544P.
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N-PSDB; ADL57124.
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23-SEP-2002;
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Gaps

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99.6%; Score 1108; DB 8; Length 209; 99.5%; Pred. No. 1.7e-91; ive 0; Mismatches 1; Indels (

Query Match Best Local Similarity 99.5 Matches 208; Conservative

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180
                                                            61 LEIREDGIVGGAADQSPESELLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPBA 120
                                                                                                      121 CSFRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGI 180
                                         LEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA 120
            9
                                                                                                                                                                                                                                                                                                                                                                                            human; antidiabetic; anorectic; cardiant; hypotensive; antiarteriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; noorropic; neuroprotective; antiparkinsonian; anticorvulsant; osteopathic; antiarthritic; antiinflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; FGRR4; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; alpha-2 macroglobulin-like polypeptide variant; anticlekoptoteinase I precursor; LiV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-necendorphin-dynorphin precursor.
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1 MDSDEAGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
                                                                                                                       Padigaru M, Rieger DK;
                                                                                                                                                                  181 LAPOPPDVGSSDPLSMVGPSQGRSPSYAS 209
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                                                                                                                                                                                                                                                                                                                                                                  Human NOV6h protein SEQ ID NO:68.
                                                                                                                                                                                                                                                                            ADL57123 standard; protein; 209
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2002US-0409544P.
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2002US-0412766P.
2002US-0412825P.
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2002US-0413342P.
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25-SEP-2002;
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                                                                                                                                                                                                                                                              ADL57123
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antidiabetic; anorectic; cardiant; hypotensive;

The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, anorectic, cardiant, hypotensive, antiatrateriosclerotic, anorectic, cardiant, hypotensive, antiatrateriosclerotic, anorectic, antiabacterial, fungicide, protozoacide, nootropic, contrarthritic, antialparkinsonian, anticonvollashit, oscopathic, antialpamentory, demanciolagical, antiasthmatic, and antiabodies antilapaemic activity. A polymucleotide of the invention may have a use in gene therapy. The polypeptides, nucleic acid molecules and antiabodies are useful in the manufacture of a medicament for treating a syndrome contraction of applyabitides, nucleic acid molecules, polypeptides and antiabodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders. Cr treating, preventing or diagnosing diseases such as metabolic disorders, chelmithic, and protozoal), anorexia, cancer, cardiovascular diseases (hypertension, atherosclerosis), neurodegenerative disorders, Alzheimer's disease, Parkinson's disease, epilepsy, immune disorders Alzheimer's costeoarthritis), haematopoiesis, neurodegenerative disorders, and various dyslipidaemias. The nucleic acids and polypeptides costhat modulate or inhibit e.g. neurogenesis, call differentiation, cell cratary, in generation of antibodies that bind immunospecifically to NoVX substances for use in therapeutic or diagnostic methods. The nucleic acids are further used as targets for the identification of small modecules of the invention show homology to certain known human crisus novital shows homology to certain known human crisus involval shows homology to certain known human crisus shows homology to certain growth receptor acids shows homology to certain receptors. predirsor; NOV9a-91 show homology to LIV-1 protein; NOV10a shows homology to nuclear hormone receptor NOR-1; NOV11a-11j show homology to transmembrane protein-like; NOV12a-12c show homology to beta-neoendorphin-dynorphin precursor. The present sequence represents a NOVX polypeptide (FGFR4); NOV2a shows homology to complement factor I precursor; NOV3a shows homology to matrix metalloproteinase-15 precursor; NOV4a shows homology to MDG3, NOV6a-5c show homology to T-lymphocyte surface antigen Ly-9 precursor; NOV6a-6m show homology to fibroblast growth factor-21 (FGF-21); NOV7a-7c show homology to alpha-2 macroglobulin-like polypeptide variant; NOV8a-8g show homology to antileukoproteinase 1 

Sequence 209 AA;

120 61 LEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPBA 120 9 9 CSFRELLEBGYNVYQSRAHGLPLHLHHHHHHHHHHHHHHHHHHHHHHHHHHHHH 1 MDSDBIGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH 1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH LEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPRA CSPRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGI Gaps ó 99.5%; Score 1107; DB 8; Length 209; llarity 99.5%; Pred. No. 2.1e-91; Conservative 0; Mismatches 1; Indels LAPQPPDVGSSDPLSMVGPSQGRSPSYAS 209 LAPQPPDVGSSDPLSMVGPSQGRSPSYAS 209 Local Similarity hes 208; Conserv Query Match 61 121 181 181 Best Loca Matches 셤 ઠે 유 셤 ð 셤 ઠે

ADL57127 standard; protein; 209 AA.

RESULT 10 ADL57127 Human NOV6j protein SEQ ID NO:72.

(first entry)

03-JUN-2004 ADL57127;

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The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, anorectic, cardiant, hypotensive, antiarterioaclerotic, anorectic, anorectic, cardiant, hypotensive, antiarterioaclerotic, anorectic, virucide, antibacterial, fungicide, protozoacide, nootropic, cardiathritic, antinflammatory, dermatological, antiasthmatic, and antiarthritic, antinflammatory, dermatological, antiasthmatic, and antibacted of the invention may have a use in gene therapy. The polypeptides, nucleic acid molecules and antibodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder.

The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders, diabetes, obesity, infectious diseases (viral, bacterial, fungal, helminthic, and protozoal), anorexia, cancer, cardiovascular diseases (hypertension, atherosclerosis), neurodegenerative disorders, Alzheimer's disease, Parkinson's disease, epilepsy, immune disorders asthma, and various dyslipidaemias. The nucleic acids and polypeptides asthma, and various dyslipidaemias. The nucleic acids and polypeptides that modulate or inhibit e.g. neurogenesis, cell differentiation, cell proliferation, haematopoiesis, wound healing and angiogenesis, in gene colleration of antibodies that bind immunospecifically to NOVX substances for use in therapeutic or diagnosic methods. The nucleic acids are further used as hybridisation probes, in chromosome mapping, these transity and physiciant or diagnosic methods. The nucleic acids are further used as hybridisation probes, in chromosome mapping, these transity and the proposes and the particular of the proposes. antiatrenforclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antibarkinsonian; anticonvulsant; osteopathic; antiatrhitic; antinflammatory; dermatcological; antiasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; FGRR4; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-11; alpha-2 macroglobulin-like polypeptide variant; alpha-2 macroglobulin-like polypeptide variant; antileukoproteinase 1 precursor; L'1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor. New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections. tissue typing, preventive medicine, and pharmacogenomics. The NOVX polypeptides of the invention show homology to certain known human proteins: NOVIa-1t show homology to fibroblast growth factor receptor Rieger DK; Ort I, Padigaru M, Claim 1; SEQ ID NO 72; 214pp; English. Guo X, Anderson DW, 2002US-0410320P. 2002US-0411060P. 2002US-0412766P. 2002US-0412825P. 2002US-0412767P. 09-SEP-2003; 2003WO-US028141 2002US-0414832P 2002US-0409544P (CURA-) CURAGEN CORP. 2004-315567/29. N-PSDB; ADL57126. WO2004022723-A2 Homo sapiens. 16-SEP-2002; 23-SEP-2002; 23-SEP-2002; 24-SEP-2002; 25-SEP-2002; 30-SEP-2002; 18-MAR-2004. 09-SEP-2002; 12-SEP-2002; 10-SEP-2002 Zhong M, 

25-SEP-2002; 2002US-0413342P. 30-SEP-2002; 2002US-0414832P.

(CURA-) CURAGEN CORP.

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(FGFR4); NOV2a shows homology to complement factor I precursor; NOV3a shows homology to matrix metalloproteinase-15 precursor; NOV4a shows homology to MDC3; NOV3a-5c show homology to T-lymphocyte surface antigen Ly-9 precursor; NOV6a-6m show homology to fibroblast growth factor-21 (FGF-21); NOV7a-7c show homology to alpha-2 macroglobulin-like polypeptide variant; NOV8a-8g show homology to antileukoproteinase I precursor; NOV9a-9; show homology to LIV-1 protein; NOV10a shows homology to nuclear hormone receptor NOV11a-11j show homology to transmembrane protein-like; NOV12a-12c show homology to beta-necendorphin dynorphin precursor. The present sequence represents a NOVX polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                              CSFRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPUPGLPPALPEPPGI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
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Pred. No. 2.1e-91;
0; Mismatches 1; Indels (
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2002US-0412766P.
2002US-0412825P.
2002US-0412767P.
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2002US-0410320P.
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                                                                                                                                                                                                                                                                                   208; Conservative
                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                               of the invention.
                                                                                                                                                                                                                Sequence 209 AA;
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23-SEP-2002;
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Best Local S
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                                                                                                                                                                                                                                                                                   Matches
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The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the apecification. A polypeptide of the invention has antidaberia.

CC anorectic, cardiant, hypotensive, antiarteriosclerotic, anorectic, cardiant, hypotensive, antiarteriosclerotic, anceropic, antidaterial, fungicide, protozoacide, noctropic, antidaterial, fungicide, protozoacide, noctropic, antidaterial, fungicide, protozoacide, noctropic, antidaterial fungicides, nucleic acid molecules and antibodies are useful for the manual acture of a medicament for treating any have a use artilipaemic activity. A polypeptides nucleic acid molecules and antibodies are useful for treating, preventing or diagnosing diseases und antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders. CC disease, parting or diagnosing diseases such as metabolic disorders, including and protozoal), anoroxais, cancer, cardiovascular diseases (hypertension, atherosclerosis) neurodegenerative disorders, including, and various dyslipidaemias. The nucleic acid and oblypeptides and antibodies are disorders (astease, partinon) a disease, epilepsy, immune disorders, in generation, and various dyslipidaemias. The nucleic acid and oblypeptides are targets for the identification of small molecules are further used as targets for the identification of small molecules or inhibit e.g. neurogenesis, and pharmacogenesis, in generation, haematopolesis, wound healing and angiogenesis, in generation, haematopolesis, molecules, polypeptides of the inventive medicine and protope, preventive medicine and protope, preventive medicine and protope, in chromosome mapping, preventive medicine and protope, in chromosome mapping, preventive medicine, and pharmacogenomics. The NOVA cleases though to mology to fibroblast growth factor receptor (FGF4), NOVAs allows homology to fibroblast growth factor along shows homology to matrix metalloproteinase. Superpride variant; NOVAs and show homology 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CSFRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGI 180
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                                                                                                                                                                                                     New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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                                                                                                  Padigaru M, Rieger DK;
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Pred. No. 2.1e-91;
0; Mismatches 1; Indels (
                                                                                                  Ort I,
                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 74; 214pp; English.
                                                                                                     Guo X, Anderson DW,
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Matches 208; Conservative
                                                                                                                                                                                                                                                                       asthma, or infections.
                                                                                                                                            WPI; 2004-315567/29.
N-PSDB; ADL57128.
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                                                                                                     Zhong M,
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WO200118172-A2
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                                                                                                                                                                                                                                                                                                                                                        121 CSFRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGQPPALPEPPGI 180

    9
/note= "predicted casein kinase II phosphorylation site"

                                                                                                                                                                                                                                                                                                                           note= "protein kinase C predicted phosphorylation site"
08. .113
                                                                                                                                                                                                                                                                                                                                                               "predicted casein kinase II phosphorylation site"
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                                                                                                                                                                                                                                                                                                                                                                               /note= "protein kinase C predicted phosphorylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is that of human JAFFA, a novel member of the fibroblast growth factor family. Analysis of rare sequences in the Millennium database led to the identification of an expressed sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               growth factor family members (JAFFA) are useful for developing novel diagnostic and therapeutic agents for JAFFA-associated disorders such
                                                                                                                                       JAFFA; human; fibroblast growth factor; diagnosis; therapy; cancer; autoimmune disease; cytostatic; immunosuppressive; neuroprotective.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Isolated JAFFA nucleic acid molecules which encode novel fibroblast
                                                                                                                                                                                                                                                                       LAPQPPDVGSSDPLSMVGPSQGRSPSYAS 209
                                                                                                                                                                                                                                               "N-myristoylation"
                                                                                                                                                                                                                                                                                               "N-myristoylation"
                                                                                                                                                                                                                                                                                                                "N-myristoylation"
                                                                                                                                                                                                                                                                                                                                               'note= "N-myristoylation"
                                                                                                                                                                                                                              "N-myristoylation"
               LAPOPPDVGSSDPLSMVGPSQGRSPSYAS
                                                                                                                                                                                      1. .28
/label= Signal_peptide
                                                                                                                                                                                                                                                              'label= Mature_protein
                                                                                                                                                                               Location/Qualifiers
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                                                                      AAB82351 standard; protein; 209
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                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-00444165
                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MILL-) MILLENNIUM PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                              22-NOV-2000; 2000WO-US032181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-355881/37.
N-PSDB; AAF90326, AAF90327.
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                                                                                                                       Human JAFFA protein
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                                                                                                                                                               Homo sapiens
                                                                                                      23-JUL-2001
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                181
                               181
                                                                                      AAB82351;
                                                                                                                                                                                Key
Peptide
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tag from a human prostate tumour library which coded for a novel
hypothetical signal peptide. Further analysis led to the identification
of JAPPA. The invention provides JAPPA polypetides, polymicleotides and
anti-JAPPA antibodies. It also provides antisense nucleic acid molecules,
crecombinant expression vectors, host cells and transgenic animals. JAPPA
proteins may be useful for developing novel diagnostic and therapeutic
proteins may be useful for developing novel diagnostic and therapeutic
which demonstrate ABO(H) blood group disorders and other disorders
which demonstrate ABO(H) blood group disorders and for controlling
cellular proliferative and/or differentiative disorders. The JAPPA
cellular proliferative such as autoimmune disease and multiple sclerosis.
The proteins may also be used to screen for naturally occurring JAPPA
substrates, to screen for drugs or compounds which modulate JAPPA
substrates, to screen for drugs or compounds which can be used to detect
and isolate JAPPA proteins, regulate the bioavailability of JAPPA
proteins and modulate JAPPA activity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CSFRELLLEDGYNVYOSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fibroblast Growth Factor; FGF; treatment; cirrhosis; mucositis; diabetes; inflammatory bowel disease; Crohn's disease; obesity; tubular necrosis; renal tubule damage; gastrointestinal abnormality; wasting syndrome; neurodegenerative disease; hematopoietic cell reconstitution; cachexia; chemotherapy; corneal epithelium damage; retinal tissue damage; myopathy; autitiple sclerosis; short stature; delayed maturation; excessive growth; acromegaly; premature maturation; alopedia; bronchopulmonary dysplasia; androgen target organ abnormality; respiratory distress syndrome; stroke; cacher; arberoselarosis; hypercholesterolaemia; osteoporosals; baldness; osteoparthitis; muscle atrophy; sarcoponia; wrinkles; increased fatique; decreased stamina; decreased cardiac function; immune system dysfunction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MDSDETGFEHSGLWYSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1106; DB 4; Length 2
Pred. No. 2.6e-91;
0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAPQPPDVGSSDPLSMVGPSQGRSPSYAS 209
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 208; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
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psoriasis;

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Novel sbgFGF-19a polypeptide, a member of fibroblast growth factor family and polynucleotides encoding them useful for diagnosing, treating stroke, psoriasis, cancer, atherosclerosis, rheumatoid arthritis and cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 LEIREDGTVGGAADQSPESLLQLKALKRGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polypeptide is a member of fibroblast growth factor family of polypeptides. The polynucleotides and polypeptides are useful in the treatment of diseases such as stroke, traumatic brain injury, cerebral schemia, cancer, atherosclerosis, rheumatoid arthritis, cirrhosis, psoriasis, sarcoidosis, idiopathic pulmonary fibrosis, tumour developmental disorders, skeletal disorders, wound repair, and acrocephaly. They are also useful as vaccines for inducing an immunological response in a mammal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CSFRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence represents a human sbgFGF-19a polypeptide. The
                                   traumatic brain injury; cerebral ischemia; atherosclerosis; rheumatoid arthritis; cirthosis; sarcoidosis; wound repair; indopathic pulmonary fibrosis; tumour development; vaccine development and disorder; skeletal disorder; acrocephaly.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 4; Length 209;
                                                                                                                                                                                                                                                                                                                                                                                                   Kabnick KS, Mcqueney MS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                 growth factor; stroke;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1106; DB 4;
Pred. No. 2.6e-91;
0; Mismatches 1
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                                                                                                                                                                                                                                                                                                                                                                                                   Barone F, Feild JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human NOV6b protein SEQ ID NO:56.
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                                                                                                                                                                                                                                                                                                                                                           (SMIK ) SMITHKLINE BEECHAM CORP.
                   fibroblast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99.4%;
                                                                                                                                                                                                                                                                          03-NOV-2000; 2000WO-US030478
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Matches 208; Conservative
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                      BbqFGF-19a;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; AAF89921
                                                                                                                                                                                        WO200132678-A1
                                                                                                                                                                                                                                                                                                                    05-NOV-1999;
                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                  10-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                     Agarwal P,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequence represents a fibroblast growth factor-like (FGF-like)

polypeptide. FGF-like protein and its associated mucleic acid play a role
in modulating body growth, maturation or life span. They are also useful
for treating, preventing or ameliorating disorders such as cirrhosis,
inflammatory bowel disease, mucositis, Crohn's disease, diabetes,
obesity, gastrointestinal abnormalities, neurodegenerative diseases,
damage to renal tubules as a result of acute tubular necrosis,
haematopoietic cell reconstitution following chemotherapy, wasting
syndromes (e.g., cancer associated cachexia), damage to the corneal
syndromes (e.g., cancer associated cachexia), damage to the corneal
cature, delayed maturation, excessive growth (e.g. acromegaly),
premature maturation, alopecia, abnormalities of adrogen target organs,
premature maturation, alopecia, abnormalities of adrogen target organs,
promchopulmonary displasia, acute respiratory distress syndrome, tumours
of the eye or other tissues, atherosolesosis, hypercholesterolemia,
stroke, osteoporosis, osteoarthritis, muscle atrophy, sarcopenia,
chaldness, wrinkles, increased fatigue, decreased teamina, decreased
cardiac function, immune system dysfunction, cancer, Parkinson's disease,
senile dementia, Alzheimer's disease, and decreased cognitive function
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                                                                                                                                                                                                                                                                                                                    Novel isolated fibroblast growth factor-like polypeptide useful for treating, preventing or ameliorating cirrhosis, inflammatory bowel disease, mucositis, Crohn's disease, diabetes, obesity, stroke and
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Pred. No. 2.6e-91;
0; Mismatches 1;
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                                                               05-SEP-2000; 2000WO-US024373
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Local Similarity 99.5%;
les 208; Conservative
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2000US-00644052
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23-AUG-2000;
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anticonvulsant; osteopathic; antiarthritic; antinflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; FGFR4; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; alpha-2 macroglobulin-like polypeptide variant; antileukoproteinase 1 precursor; LIV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
            antiarteriosclerotic; anorectic; virucide; antibacterial; fungicide;
protozoacide; nootropic; neuroprotective; antiparkinsonian;
antidiabetic; anorectic; cardiant; hypotensive;
                                                                                                                                                                                                                                                                                                                                                                                                     Padigaru M,
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23-SRP-2002; 2002US-0412766P.
23-SRP-2002; 2002US-0412766P.
24-SRP-2002; 2002US-0412767P.
25-SRP-2002; 2002US-0413342P.
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2002US-0410320P.
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N-PSDB; ADL57110.
                                                                                                                                                                             WO2004022723-A2.
                                                                                                                                                         Homo sapiens.
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12-SEP-2002;
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Claim 1; SEQ ID NO 56; 214pp; English.

acids are further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The NOVX polypeptides of the invention show homology to certain known human proteins: NOVIa-1t show homology to fibroblast growth factor receptor

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(FGFR4); NOV2a shows homology to complement factor I precursor; NOV3a shows homology to matrix metalloproteinase-15 precursor; NOV4a shows homology to MCS4. NOV5a-5c show homology to T-1ymphocyte surface antigen Ly-9 precursor; NOV6a-6m show homology to fibroblast growth factor-21 (FGF-21); NOV7a-7c show homology to alpha-2 macroglobulin-like procursor; NOV9a-9i show homology to alpha-2 macroglobulin-like precursor; NOV9a-9i show homology to LIV-1 protein; NOV10a shows homology to nuclear hormone receptor NOR-1; NOV1a-11j show homology to beta-necendorphin transmembrane protein-like; NOV12a-12c show homology to beta-necendorphin developments of the present sequence represents a NOVX polypeptide
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                                                                                                                                                                                                                                                                            Sequence 209 AA;
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Database :

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Description	Aag65667 Human fib	Aab68417 Amino aci	Aau79289 Human FGF	Aae18826 Human FGF	Human	Adl57123 Human NOV	Adl57125 Human NOV		Aae05078 Human fib		Abg32358 Human fib	Aael7601 Human ext	Abu80777 Human PRO	Novel	Novel	Human		Abj72394 Human PRO	Human	Ada37038 Human fib	Abj72096 Human mem	Adb83568 Novel hum	Adb80674 Novel hum	Adb73215 Novel hum	Adb78297 Novel hum
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a protein and the polynucleotide encoding it, useful as drugs for injuries, burns, thrombosis, arteriosclerosis, hepatopathy, pancreopathy and diabetes. This sequence represents a human FGF-related protein of the invention
                                                                                                                1 MDSDETGPEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
                                                                                                                                                                                        LEIREDGTVGGAADQSPBSLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA
                                                                                                                                                                                                                                                                1 MDSDETGFEHSGLWVSVLAGILLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
                                                                                           1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human, injury; burn; thrombosis; arteriosclerosis; pancreopathy;
hepatopathy; PGF-related protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 209; DB 5; Length 209; 100.0%; Pred. No. 1.1e-190;
               , DB 4; L
                                                    0; Mismatches
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               100.0%; Score 209;
100.0%; Pred. No. 1
                                                                                                                                                                                                                                                                                                                                         LAPQPPDVGSSDPLSMVGPSQGRSPSYAS
                                                                                                                                                                                                                                                                                                                    LAPOPPDVGSSDPLSMVGPSQGRSPSYAS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-JUL-2000; 2000JP-00213385.
03-AUG-2000; 2000JP-00240398.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human FGF-related protein.
               Query Match
Best Local Similarity 100.
Matches 209; Conservative
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Matches 209; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 209 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JP2002112772-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diabetes.
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                                                                                                                                                                                                                                                                                                                                       180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fibroblast growth factor-21; FGF-21; cell growth; cell differentiation; hepatic cell; cirrhosis; infertility; impotence; testicular cancer; leukemia; lymphoma; autoimmune disease; thymus proliferative disorder.
                                                                                                                                                                      1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYIDDAQQTEAH
                                                                                                                                                                                                                                            1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
                                                                                                                                                                                                                           LEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA
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                                                                                                              Gaps
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represent amino acid sequences of some members of the FGF family
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                                                                                                          Indels
                                                                         Length
                                                                       Score 209; DB 4; I
Pred. No. 1.1e-190;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB68417 standard; protein; 209
                                                                       100.0%;
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11-MAY-2000; 2000US-0203633P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                            Matches 209; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kavanaugh WM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001-343823/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CHIR ) CHIRON CORP. (KYOU ) UNIV KYOTO.
                                                                                           Similarity
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                                    Sequence 209 AA
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                                                                       Query Match
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present sequence is human FGF-21 protein which is a member of the FGF

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The invention relates to fibroblast growth factor (FGF)-like polypeptides and nucleic acid molecules encoding such polypeptides. Sequences of the invention are useful for treating dermal wounds, epidermolysis, condition. They are useful for treating dermal wounds, epidermolysis, bullosa, male pattern alopecia, gastric ulcer, duodenal ulcer, erosive condition. They are useful for treating dermal wounds, epidermolysis, bullosa, male pattern alopecia, gastric ulcer, duodenal ulcer, erosive contists, chempers, inflammatory bowel disease, ccom, sintensmatory bowel classas, to contist, pulmonary fibrosis, pulmonary fibrosis, contral hepatitis, mucositis, multiple sclerosis and other viral hepatitis, mucositis, multiple sclerosis and other currhosis, toxic insults to the liver, fulminant liver failure, viral hepatitis, diseases, infantile respiratory distress syndrome, concompulmonary dysplasia, acute respiratory distress syndrome, concompulmonary dysplasia, acute respiratory distress syndrome, concompulmonary dysplasia, acute respiratory distress syndrome, concompulmonary dysplasia, enthe respiratory distress syndrome, concompulmonary dysplasia, acute respiratory distress syndrome, concompulmonary dys
CSFRELLEDGYNVYQSEAHGLPLHLPCNKSPHRDPAPRGPARFLPLPGLPPALPEPPGI
                                                                                  CSFRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ribroblast growth factor; FGF-like protein; wound healing; bullosa; epidermolysis; erosive gastritis; inflammatory bowel disease; ulcer; oesophagitis; Crohn's disease; hyaline membrane disease; emphysema; pulmonary fibrosis; hepatic cirrhosis; liver failure; angiogenesis; multiple sclerosis; neurodegenerative disease; lung abnormality; viral hepatitis; respiratory distress syndrome; tumour; skin aging; gene therapy; vaccine; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel fibroblast growth factor-like polypeptide useful for treating, ameliorating and/or preventing dermal wounds, gastric ulcer, Crohn's disease and pulmonary inflammation.
                                                                                                                                                                                                                                 LAPOPPDVGSSDPLSMVGPSQGRSPSYAS 209
                                                                                                                                                                                    LAPOPPDVGSSDPLSMVGPSQGRSPSYAS
                                                                                                                                                                                                                                                                                                                                                                 AAE18826 standard; protein; 209 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human FGF-21 protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          duodenal ulcer; stomach erosion; oesophagus erosion;
inflammatory bowel disease; Crohn's disease; hyaline membrane disease;
smoke inhalation; emphysema; hepatic cirrhosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid encoding a fibroblast growth factor-like polypeptide useful to diagnose, treat, ameliorate or prevent associated diseases including epidermolysis bullosa, cirrhosis, hair loss and gastric and duodenal ulcers.
                                                                                                                                                                 1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
                                                                                                      MDSDETGFEHSGLWVSVIAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
                                                                                                                                                LEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPRA
                                                                                                                                                                                                           CSFRELLLEDGYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGI
                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human, fibroblast growth factor; FGF; epidermolysis bullosa; chemotherapy-induced alopecia; male baldness; gastric ulcer;
                            Length 209;
                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human fibroblast growth factor (FGF) protein, FGF-21.
                                             Pred. No. 1.1e-190;
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                            DB 5;
                                                         0; Mismatches
                                                                                                                                                                                                                                                                                           LAPQPPDVGSSDPLSMVGPSQGRSPSYAS 209
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                            100.0%; Score 209;
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02-APR-2001; 2001US-00822485.
                                             100.08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        thymic epithelial atrophy
                                                         Matches 209; Conservative
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                                           Similarity
Sequence 209 AA;
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                            Query Match
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New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,

asthma, or infections.

WPI; 2004-315567/29. N-PSDB; ADL57122.

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                                                                                                                                                                                       LEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA 120
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bowel disease such as Crohn's disease, hyaline membrane disease of premature infants, smoke inhalation, emphysema, hepatic cirrhosis and thymic epithelial atrophy. The nucleic acids may also be used to map locations of FGF-like gene and related genes on chromosomes. The present sequence represents a human FGF protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           human; antidiabetic; anorectic; cardiant; hypotensive; antidiabetic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopathic; antiarthritic; antiinflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy; libroblast growth factor receptor 4; FGFR4; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen Ly-9 precursor; fibroblast growth factor-21; FGF-21; alpha-2 macroglobulin-like polypetide variant; antieukoproteinase 1 precursor; LiV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
                                                                                                                                                        1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
                                                                                                                                                                                                     LEIREDGTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA
                                                                                                                                         1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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                                                                                           100.0%; Score 209; DB 8; L
100.0%; Pred. No. 1.1e-190;
cive 0; Mismatches 0;
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10-SEP-2002; 2002US-041032DP.

15-SEP-2002; 2002US-0411030P.

16-SEP-2002; 2002US-0411066P.

23-SEP-2002; 2002US-0412766P.

24-SEP-2002; 2002US-0412766P.

25-SEP-2002; 2002US-041342P.
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                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                 Matches 209; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CURA-) CURAGEN CORP.
                                                                                            Query Match
Best Local Similarity
                                                                      Sequence 209 AA;
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The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide, antibacterial, fungicide, protozoacide, noctropic.

CC virucide, antibacterial, fungicide, protozoacide, noctropic, neuroprotective, antiparkinsonian, anticonvulsant, osteopathic, antiarthritic, antimifarmancy, dermatological, antiaschmatic, and antibodies antiarthritic, antimifarmatory, dermatological, antiaschmatic, and antibodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder.

CC antilipaemic activity, A polymucleotide of the invention may have a use insecting, preventing or diagnosing diseases such as metabolic disorder.

CC The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorder.

CC The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases (viral, bacterial, fungal, bacterial, fungal, bacterial, and protozoal), anorexia, cancer, cardiovascular disorders, disease, Parkinson's disease, epilepsy immune disorders

CC disease, Parkinson's disease, epilepsy; immune disorders

(ostecoarthritis), hematopoletic disorders, inflammatory skin disorders asthma, and variuos dyslipidaemias. The nucleic acids and polypeptides of the impublic e.g. neurogenesis, cell differentiation, cell proliferation of antibodies that bind immunospecifically to Novx substances for use in therapeutic or diagnostic methods. The novel contains novel proteins novel propessing section in the propessing preventive medicine, and pharmacogenomics. The NoVX substances homology to conflement factor I precursor; NOV3 shows homology to complement factor I precursor; NOV3 shows homology to complement actors. I precursor; NOV3 shows homology to co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ly-9 precursor; Nov6a-6m show homology to fibroblast growth factor-21 (RFF-21); NOV7a-7-c show homology to alpha-2 macroglobulin-like polypept); NOV7a-7-c show homology to antileukoproteinas 1 precursor; NOV9a-9; show homology to LIV-1 protein; NOV10a shows homology to LIV-1 protein; NOV10a shows homology to LIV-1 protein; NOV10a shows homology to change at hormone receptor NOX-1; NOV11a-11; show homology to transmembrane protein-like; NOV12a-12c show homology to beta-necendorphin dynorphin precursor. The present sequence represents a NOVX polypeptide
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Claim 1; SEQ ID NO 68; 214pp; English.
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                                                                                                                                               human; antidiabetic; anorectic; cardiant; hypotensive; antiarteriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopathic; antiarthritic; antiinflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; FGFR4; complement factor I precursor; matrix metalloproteinase-15 precursor; MDC3; T-lymphocyte surface antigen by-9 precursor; fibroblast growth factor-21; FGF-21; antileukoproteinase-15 precursor; alpha-2 macroglobulin-like polypeptide variant; antileukoproteinase 1 precursor; LIV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rieger DK;
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                                       ADL57125 standard; protein; 209 AA.
                                                                                                                         Human NOV6i protein SEQ ID NO:70.
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; 2002US-0412766P.
; 2002US-0412825P.
; 2002US-0412767P.
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                                                                                             (first entry)
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23-SEP-2002;
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25-SEP-2002;
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                                                                                             03-JUN-2004
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                                                                   ADL57125;
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                          ADL57125
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Cubercontinitis), insequency cases. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibit e.g. neurogenesis, cell differentiation, cell proliferation, haematopoiesis, would healing and angiogenesis, in generation of antibodies that bind immunospecifically to NOVX substances for use in therapeutic or diagnostic methods. The nucleic acids are further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The NOVX polypeptides of the invention show homology to certain known human proteins NOV1a-it show homology to certain known human proteins NOV1a-it show homology to cortain known human proteins NOV1a shows homology to complement factor I precursor; NOV3a shows homology to matrix metalloproteinse-15 precursor; NOV4a shows homology to matrix metalloproteinse-15 precursor; NOV4a shows homology to MDC3; NOV5a-5c show homology to fibroblast growth factor-21 (FGF-21); NOV7a-7c show homology to fibroblast growth factor-21 (FGF-21); NOV7a-7c show homology to fibroblast growth factor-21 precursor; NOV9a-9i show homology to intleave antigen precursor; NOV9a-9i show homology to intleave antigen precursor; NOV9a-9i show homology to intleave antigen precursor; NOV9a-9i show homology to intleave homology to nuclear hormone receptor NOV1a-12c show homology to beta-necendorphin grecursor. The present sequence represents a NOVX polypeptide
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(osteoarthritis), haematopoletic disorders, inflammatory skin disorders
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Best Local Similarity 100.0
Matches 203; Conservative
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137 137

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LAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSP 18 LAGLLIGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLBIREDGTVGGAADQSP ESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQS

18

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209

GPSQGRSPSYAS

198

198 GPSOGRSPSYAS 209

EAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMV 197

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78 78

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The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the pecification. A polypeptide of the invention has antidiabetic, anorectic, cardiant, hypotensive, antiarteriosolated, nootropic, virucide, antibacterial fungicide, protozoacide, nootropic, antiarthritic, antiinflammatory, dermatological, antiasthmatic, antilinflammatory, dermatological, antiasthmatic, antilinflammatory, dermatological, antiasthmatic, antilinflammatory dermatological, antiasthmatic, and use therapy. The polypeptides, nucleic acid molecules and antibodies are useful in the manufacture of a medicannet for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders, diabetes, obssity, infectious diseases (viral, bacterial, fungal, helminthic, and protozoal), anorexia, cancer, cardiovascular diseases (hypertension, atherosclerosis), neurodegenerative disorders, alsease, parkinson's disease, epilepsy, immune disorders, alsease, epilepsy, immune disorders, achimatopoletic disorders, and various dyslipidaemias. The nucleic acids and polypeptides and antibodic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        that modulate or inhibit e.g. neurogenesis, cell differentiation, cell proliferation, haematopoiesis, wound healing and angiogenesis, in generation of antibodies that bind immunospecifically to NoVX substances for use in therapeutic or diagnostic methods. The mucleic acids are further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The NoVX polypeptides of the invention show homology to certain known human proteins: NoV1a-1t show homology to fibroblast growth factor receptor (FGFR4); NOV2a shows homology to complement factor I precursor; NOV3a shows homology to complement factor I precursor; NOV3a hows homology to complement factor I precursor; NOV3a how homology to T-1ymphocyte surface antigen Ly-9 precursor; NOV5a-5c show homology to fibroblast growth factor-21 (FGFR21); NOV7a-7c show homology to fibroblast growth factor-21 (FGFR21); NOV7a-7c show homology to fibroblast growth factor-21 (FGFR21); NOV3a-8g show homology to antileukoproteinase 1 precursor; NOV9a-9i show homology to antileukoproteinase 1 precursor; NOV9a-9i show homology to contileukoproteinase 1 precursor; NOV9a-9i show homology to contileukoproteinase 1 precursor; NOV9a-9i show homology to contileukoproteinase 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 to nuclear hormone receptor NOR-1; NOV11a-11; show homology to transmembrane protein-like; NOV12a-12c show homology to beta-neoendorphin dynorphin precursor. The present sequence represents a NOVX polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zhong M, Guo X, Anderson DW, Ort T, Padigaru M, Rieger DK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 66; 214pp; English.
                                                                                                                                                                                                      2002US-0411060P.
2002US-0412766P.
2002US-0412825P.
2002US-0412767P.
                                                      09-SEP-2003; 2003WO-US028141.
                                                                                                                                            2002US-0409544P.
                                                                                                                   2002US-0409145P
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N-PSDB; ADL57120.
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                                                                                                                                               10-SEP-2002;
                                                                                                                                                                                                            16-SEP-2002;
                                                                                                                                                                                                                                            23-SEP-2002;
                                                                                                                                                                                                                                                                         23-SEP-2002;
                                                                                                                                                                                                                                                                                                      24-SEP-2002;
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18-MAR-2004
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Human; fibroblast growth factor; FGF; zFGF11; chromosome 19; restenosis; proliferation; mesenchymal cell; osteoblastic lineage cell; osteoblassis; proliferation; disserder; chondrosarcoma; atherosclerosis; obesity; fracture; bone formation; diabetes mellitus; neural cell development; angiogenesis; amyotrophic lateral sclerosis; cerebrovascular stroke; neuropachy, ulcer; congenital disorder; wound healing; cardiac function; glomerulonephilitis; eurfactant production; anorectic; ischaemia; neogenesis; hyperplasia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence is human fibroblast growth factor (FGF) homologue, zFGF11 protein. SFGF11 gene is located on chromosome 19. zFGF11 is useful for stimulating proliferation of mesenchymal cells. osteoblastic lineage cells. zFGF11 is useful for identifying chromosomal disorders associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel zFGF11 polypeptide and polynucleotide, a member of fibroblast growth factor family, for stimulating proliferation of mesenchymal, osteoblastic lineage cells and treating diabetes, obesity, osteoporosis, cancer.
                                                                                                                              Human fibroblast growth factor (FGF) homologue, zFGF11 protein.
                                                                                                                                                                                                                                                                                                                                                                                                   28. 208
/label= Human_mature_zFGF11_protein
44. 46.
/note= "Heparin binding domain"
                                                                                                                                                                                                                                                                                   hypertension; cytostatic; vasotropic; therapy.
                                                                                                                                                                                                                                                                                                                                                                       1. .27
/label= Signal_peptide
                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                 AAE05078 standard; protein; 208 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 63; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-JAN-2001; 2001WO-US000324.
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                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ZYMO ) ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conklin DC, Chen Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-441880/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-PSDB; AAD09151
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                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                      Binding-site
                                                                                                18-SEP-2001
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                                                                AAE05078;
                                                                                                                                                                                                                                                                                                                                                                    Peptide
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RESULT 9
                 AAE05078
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Gaps ö

Length 209;

Query Match 91.9%; Score 192; DB 8; Length 20; Best Local Similarity 100.0%; Pred. No. 1.8e-174; Matches 192; Conservative 0; Mismatches 0; Indels

2000WO-US020710 2000US-0227133P 2000WO-US023522 2000WO-US023328 2000WO-US030873 2000WO-US032678 2000US-00747259 2000WO-US034956 2001WO-US006520 2001WO-US006666 2001US-00816744

26-JUL-2000;

01-AUG-2000; 22-AUG-2000; 23-AUG-2000;

24-AUG-2000; 10-NOV-2000; 28-NOV-2000; 01-DEC-2000; 20-DEC-2000;

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creet stem cells and neuronyles, neural tune-derived stem cells, neural creet stem cells and neuronyles, neural tune-derived stem cells and neuronyles, neural tune-derived cells and endothelial cells and inhibiting chondrosarcomas, atherosclerosis restenosis and obseity. Stimulation of Gateoblasts results in bone formation useful for treating bone defects, fractures, ceteoporosis and other deficiencies in bone structure and formation.

Steppil is useful for treating disorders associated with diabetes mellitus, neural cell development or degeneration, amyotrophic lateral sclerosis, cerebrovascular stroke, neuropathy associated with lack of maintenance of neuronal differentiation and congenital disorders of the nervous system or lack of neuronal development, promoting anglogenesis and wound healing, for revascularisation in eye, complications related to poor circulation such as diabetic food ulcers, improving cardiac to reduce damage to the tissue caused by ischaemia or ischaemia-reperfusion events, particularly in the heart or brain and for inducing skeletal muscle neogenesis and/or hyperplasia, kidney regeneration and/or for treating of systemic and pulmonary hypertension. Antagonists of zPGF11 are useful for inhibiting disorders associated with kidney epithelium cut as glomerulonephritis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81 QLKALKPGVIQILGGVKTSRPLCQRPDGALYGSLHFDPBACSFRELLLEDGYNVYQSBAHG 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
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with abnormal expression of zFGF11 protein. zFGF11 is also useful for stimulation, inhibition or proliferation of myocytes, smooth muscle cells, adipocytes, chondrocytes, neural tube-derived stem cells, neural
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141 LPIHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMVGPSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22 LIGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 LIGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLRIREDGTVGGAADQSPESLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPBPPGILAPQPPDVGSSDPLSMVGPSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           secreted protein; PRO; tumour; lung cancer; colon cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               breast cancer; prostate tumour; rectal tumour; liver tumour; pericyte cell proliferation; tumour necrosis factor-alpha.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90.0%; Score 188; DB 4; Length 20
100.0%; Pred. No. 1.2e-170;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAU83630 standard; protein; 208 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.
Matches 188; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GRSPSYAS 208
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 208 AA;
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One hundred and twenty two nucleic acids encoding PRO polypeptides, useful for treating a PRO related disorder and for diagnosing tumors such as lung cancer, colon cancer, breast tumor, prostate tumor, rectal tumor

Claim 11; Fig 78; 359pp; English.

or liver tumor,

Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI;

Baker KP, Desnoyers L, Grimaldi JC, Gurney AL;

WPI; 2002-172001/22.

N-PSDB; ABK33574

(GETH ) GENENTECH INC.

2001WO-US017092

25-MAY-2001;

10-MAY-2001

22-MAR-2001; 10-MAY-2001;

01-MAR-2001;

20-DEC-2000; 28-FEB-2001;

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stimulating the release of tumour necrosis factor-alpha from human blood, for stimulating or inhibiting the proliferation of normal human dermal fibroblast cells. The PRO polypeptide may also be used as molecular weight markers and for tissue typing. The PRO nucleic acids have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. AAU83592-AAU83713 represent human PRO protein sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to one hundred and twenty two nucleic acids encoding PRO polypeptides. The sequences of the 122 PRO polymucleotides encode human secreted proteins. The PRO nucleic acids, polypeptides, agonists and antagonists are useful for treating a PRO related disorder. The PRO polypeptides are useful for diagnosing tumours, especially lung cancer, colon cancer, breast tumour, prostate tumour, rectal tumour or liver tumour. The PRO polypeptides are useful for stimulating the proliferation of, or gene expression, in pericyte cells, for stimulating the proliferation or differentiation of chondrocyte cells for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21 LIGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82 QLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               142 LPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPBPPGILAPQPPDVGSSDPLSMVGPSQ
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20-JUL-2000; 2000US-0219556P. 25-JUL-2000; 2000US-0220585P. 25-JUL-2000; 2000US-0220605P. 25-JUL-2000; 2000US-0220607P.

20-JUL-2000;

29-JUN-2001; 2001WO-US021066

WO200208288-A2 Homo sapiens.

31-JAN-2002

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28. .208 // Anotes "Mature fibroblast growth factor homologue, zFGFI1. This sequence is specifically claimed in claim 4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  fibroblast growth factor; FGF; zFGF11; mesenchymal cell; FGFRIIIc;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 osteoblastic lineage cell; diabetes mellitus; neuropathy;
neural cell development; amyotrophic lateral sclerosis;
cerebrovascular stroke; neuronal differentiation; congenital disorder;
nervous system disorder; cardiac function; wound healing.
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                                                                                                                                                                                                                                                                                                                                                                                                    Human fibroblast growth factor (FGF) homologue, zFGF11.
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/label= Signal_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                    ABG32358 standard; protein; 208 AA
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Chen Z;
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Gaps

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Length 208; 0; Indels

Query Match 90.0%; Score 188; DB 5; Le Best Local Similarity 100.0%; Pred. No. 1.2e-170; Matches 188; Conservative 0; Mismatches 0;

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The present invention relates to new extracellular messenger polypeptides and polymucleotides encoding them. XMBS is useful in the diagnosis, treatment and prevention of neurological disorders (e.g. epilepsy, stroke, or Alzheimer's disease), autoimmune/inflammatory disorders (e.g. acquired immune deficiency syndrome, AIDS, Addison's disease, or allergies), developmental disorders (e.g. renal tubular acidosis, anaemia or Cushing's syndrome), endocrine disorders (e.g. hypophysectomy, aneurysm or vascular malformation), and cell proliferative disorders
                                                                                140
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; extracellular messenger; neurological disorder; epilepsy; XMES-3; Alzheimer's disease; autoimmune disorder; renal tubular acidosis; stroke; acquired immune deficiency syndrome; AlDS, Addison's disease; cytostatic; developmental disorder; anaemia; Cushing's syndrome; endocrine disorder; vascular malformation; cell proliferative disorder; gene therapy; cancer; hyporthropidism; phypothyroidism; antihelminthic; hyperthyroidism; gonadal steroid hormone; pancreatic disorder; nootropic; diabetes mellitus; immunosuppressive; anti-inflammatory; antibacterial; antiviral; antifungal; parasitic; protozoal; allergy.
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S, Hafalia A;
21 LLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESLL
                                                                 QLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAHG
                                                                                                                     142 LPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMVGPSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New extracellular messenger polypeptides and polynucleotides encoding them, useful for diagnosing, treating or preventing e.g. neurological autoimmune, inflammatory, developmental and endocrine disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nguyen DB, Walia N, Gandhi AR,
Lu Y, Baughn MR, Duggan BM, Lee
                                                                                                                                                                                                                                                                                                                                                                                                                            Human extracellular messenger (XMES)-3 protein.
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                                                                                                                                                                                                                                                                                                                     AAE17601 standard; protein; 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-JUN-2000; 2000US-0210233P.
23-JUN-2000; 2000US-0213465P.
14-NOV-2000; 2000US-0249019P.
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O, Tang YT,
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N-PSDB; AAD28493.
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Policky
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                                                                                                                                                                                                                                                                                                                  82 QLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPRACSFRELLLBDGYNVYQSEAHG 141
                                                                                                                                                                                                                                                                                                                                                                                 LPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMVGPSQ 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; PRO polypeptide; secreted and transmembrane protein;
anti-PRO antibody; diagnostic assay; gene expression; tumour; cytostatic.
                                                                                                                                                                                                                                                       81
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(e.g. cancer), and in the assessment of the effects of exogenous compounds on the expression of nucleic acid and amino acid sequences of extracellular messengers. XMES may also be used in the treatment of viral, bacterial, fungal, parasitic, protozoal and helminthic infections, trauma, disorders associated with hypopituitarism, hypothyroidism, hypothyroidism or gonadal steroid hormones, and pancreatic disorders such as type I or type II diabetes mellitus. The XMES may be used for somatic or germline gene therapy. The present sequence is human XMES-3 protein
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                                                                                                                                                                                                                                                                         21 LIGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTBAHLEIREDGTVGGAADQSPESLL
                                                                                                                                                                                                                                                                                                                                                                                                   141 LPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMVGPSQ
                                                                                                                                                                                                                                                      22 LLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLBIREDGTVGGAADQSPESLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              One hundred and twenty two nucleic acids encoding PRO polypeptides, useful for the manufacture of a medicament for diagnosing or treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PJ;
Wood V
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han JF, Watanabe CK,
                                                                                                                                                                                        90.0%; Score 188; DB 5; Length 208; 100.0%; Pred. No. 1.2e-170;
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Smith V, Stephan JF,
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01-JUN-2001; 2001WO-US017800.
29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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                                                                                                                                                                                                        Best Local Similarity 100.
Matches 188; Conservative
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N-PSDB; ACA66879.
                                                                                                                                                           Sequence 208 AA;
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The present invention relates to the isolation of novel human PRO polypeptides, and the polynucleotide sequences encoding them. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides and polynucleotides are useful for preparing a medicament useful in the diagnosis and treatment of tumours. Anti-PRO antibodies are useful in diagnostic assays for PRO, by detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. ABUS0739-ABUS0800 represent the human PRO polypeptides of the invention. Note: The sequence data for this patent was obtained in electronic format directly from the
                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                81 QLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHPDPBACSFRBLLLEDGYNVYQSBAHG 140
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Smith V, Stephan JF, Watanabe CK, Wood WI;
                                                                                                                                                                                                                                                                                                                              21 LLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTBAHLBIRBDGTVGGAADQSPBSLL
                                                                                                                                                                                                                                                                                                                                                              QLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHPDPEACSFRELLLEDGYNVYQSEAHG
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                                                                                                                                                                  USPTO web site at segdata.uspto.gov/psipsDIDEntry.html
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Pred. No. 1.2e-170;
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100.0%; Pred. No. ...
... 0; Mismatches
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29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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                                                                                                                                                                                                                                                               Matches 188; Conservative
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N-PSDB; ACD68631.
                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             arthritis; wound
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                                                                                                                                                                                                                               Query Match
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                                                                                                                                                                                                                                                    Local
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liver carcinoma; wound healing; chromosome mapping; gene mapping

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The invention describes an isolated mucleic acid molecule comprising a sequence with at least 80% identity to: (a) a nucleotide encoding any of 122 PRO (secreted and transmembrane) polygeptides whose sequences are fully defined in the specification; or (b) any of 122 mucleotide comprises are sequences having e.g. 4834, 2504 or 1759 bp fully defined in the specification; or the full length coding sequence of any these 122 mucleotide sequences. The PRO polypeptides or polymucleotides are useful as pharmaceuticals, diagnostics, blosensors or bloreactors. These are comparant tumour, breast tumour, prostate tumour, rectal tumour, colon tumour, breast tumour, prostate tumour, rectal tumour, or liver tumour) or stimulating the proliferation or differentiation of chondrocyte cells, for stimulating proliferation or differentiation of chondrocyte cells, for stimulating proliferation or differentiation of chondrocyte cells, for stimulating proliferation or differentiation of chondrocyte cells, so also useful for treating tumours or various bone and/or cortilage disorders (e.g. sports injures or arthritis), or wounds. The PRO polypeptides are useful in drug screening, particularly as targets for therapeutic intervention in these diseases, and in the diagnostic cells ouseful as molecular weight markers, or for chromosome also useful as molecular weight markers, or for chromosome calso useful in gene therapy, particularly for replacing a defective cells on the anion acid sequence of a novel human secreted and transmembrane PRO polypeptide conductors and anion acid sequence of a novel human secreted and transmembrane PRO polypeptide conductors and an open therapy, particularly for replacing and additive conductors and anion acid sequence of a novel human secreted and conductors and anion acid sequence of a novel human secreted and conductors.
                                                      or stimulating Tumor Necrosis Factor alpha, or chondrocyte or proliferation, especially for treating lung tumors, arthritis or
New genes, and its encoded secreted and transmembrane polypeptides,
useful for stimulating Tumor Necrosis אחריב יורוב יירוב אוריבייוראים
                                                                                                                                                                                        Claim 11; Fig 78; 314pp; English
                                                                                                                       wounds in a mammal.
                                                                                        pericyte
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Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI;

Desnoyers L,

Baker KP, Der Grimaldi JC,

Gurney

WPI; 2003-393229/37.

N-PSDB; ACA68535.

(GETH ) GENENTECH INC

25-JUL-2000; 2000US-0220664P. 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480.

12-AUG-2002; 2002US-00219003

US2003088063-A1

08-MAY-2003

Homo sapiens.

One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal.

Claim 11; Fig 78; 314pp; English.

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                                                                                                                            QLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAHG 140
                                                                                                                                                                           LPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMVGPSQ 201
                                                                         21 LIGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESLL 80
                                                          LLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESLL
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                                  0; Gaps
        Length 208;
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        DB 6; Le
1.2e-170;
90.0%; Scor.
100.0%; Pred. No. 1...
      Query Match
Best Local Similarity 100.0
Matches 188; Conservative
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Sequence 208 AA;

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141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention describes one hundred and eighty seven nucleic acids encoding novel human secreted and transmembrane (PRO) polypeptides. The PRO nucleic acids, polypeptides, agonists and antagonists are useful for treating or diagnosing a cardiacyascular, endothelial or angiogenic disorder in a mammal, e.g. cardiac hypertrophy, trauma, cancer, agerelated macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis, lymphagitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The PRO nucleic acids have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82 QLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSBAHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  142 LPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMVGPSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22 LLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLBIREDGTVGGAADQSPESLL
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GRSPSYAS 208
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Search completed: July 8, 2005, 22:50:44 Job time : 165 secs

antianglogenic; hypotensive; vulnenry; antiarteriosclerotic; gene therapy; cardiovascular disorder; endothelial disorder; anglogenic disorder; cardiac hypertrophy; trauma; cancer; age-related macular degeneration; atherosclerosis; hypertension; arterial restenosis; rheumatoid arthritis; angina; myocardial infarction; thrombophlebitis; lymphangitis; tumour anglogenesis; breast carcinoma;

Human; secreted and transmembrane protein; PRO; cardiant; cytostatic;

Novel human secreted and transmembrane protein PRO10196.

(first entry)

25-JUN-2003

ABU82086;

ABU82086 standard; protein; 208 AA

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on:

July 8, 2005, 22:21:15; Search time 177 Seconds (without alignments) 604.658 Million cell updates/sec

Title: Perfect score: Sequence:

US-10-060-765-4
209
1 MDSDETGFEHSGLWVSVLAG......SSDPLSMVGPSQGRSPSYAS 209

Scoring table: Object (80.0)

1612378 segs, 512079187 residues Searched:

Total number of hits satisfying chosen parameters: Word size :

1612378

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

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tion	homo sapien	homo sapien	mus musculu	rattus norv	tt virus.	tt virus.	oryza sativ	methanosarc	тусоріавша	chromobacte	rhizobium	oryza sativ	gloeobacter	corynebacte	streptomyce	deinococcus	chlamydia	caenorhabdi	xanthomonas	homo sapien	homo sapien	репаеив топ	homo sapien	streptomyce	streptomyce	chromobacte	bordetella	bordetella	bordetella	deinococcus	pseudomonas
Description	Q9nsa1	Q8n683	O9jjn1	Q8vi80	09duc8	Q9duc5	Q6ywb0	Q8tja8	Q6msv7	Q7nwz2	098100			Q6nff0	082938	09rw18	084453	P90898	Q8pad1	Q63zy4	Q8wm7	Q9u572	Q75mg6	Q8rnr9	Q82pw9	Q7nt52	Q7vu89	Q7w4s6	Q7wga2	Q9rtb8	051557
ID	FGFL_HUMAN	Q8N683	FGFL MOUSE	Q8VI80	Q9DUC8	Q9DUCS	QEYWBO	HPP2_METAC	Q6MSV7	Q7NWZ2	001860	Q8H462	Q7NHU7	Q6NFF0	Q82G38	Q9RWU8	084453	P90898	Q8PAD1	Q63ZY4	ATXL HUMAN	CLOT PENMO	Q75MG6	Q8RNR9	Q82PW9	Q7NT52	Q7VU89	Q7W4S6	Q7WGA2	Q9RTB8	051557
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* Query Match	100.0	82.8	14.4	10.0	4.8	4.3	4.3	4.3	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
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Q64rh3 bacteroides Q89jn3 bradyrhizob Q639b1 bacillus ce	bacillus bacillus		Q6v9g6 plasmodium Q9mex3 lepilemur e	Q9mey8 lepilemur d Q9ns32 homo sapien		Q7xlt5 oryza sativ	
Q64RH3 Q89JN3 Q639B1	Q81NH6 Q6HGM4	Q8RJH9 Q6V9G4	Q6V9G6 Q9MEX3	Q9MEY8 Q9NS32	041115	Q7XLTS	
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# ALIGNMENTS

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Klausner R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetcow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hatch F.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Staplecon M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,
Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
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TISSUE=Lung;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 209; DB 1; Length 209; 100.0%; Pred. No. 1.6e-201; ive 0; Mismatches 0; Indels (
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Missing (in Ref. 2).
27925C52A0023823 CRC64;
                                                                                                                     GO: 0005576; C:extracellular; TAS. 00; GO: 0005576; C:extracellular; TAS. 00; GO: 0005525; C:eoluble fraction; TAS. 00; GO: 0005625; C:eoluble fraction; TAS. 00; GO: 0007627; P:eignal transduction; TAS. InterPro; IPR002996; Cytok III like.

InterPro; IPR002999; III like.

InterPro; IPR002348; III liker.

PEAM; PF00167; FGF; 1
PRINTS; PR00263; HBGFFCP.

PRINTS; PR00263; HBGFFCP.

PRODOM; PR000831; III HBGF; 1.

PROSITE; PR00247; HBGF FGF; 1.

PROSITE; PR00247; HBGF FGF; 1.

PROSITE; PR00247; HBGF FGF; 1.
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01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Fibroblast growth factor 21,.
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EMBL; AB021975; BAA99415.1; -. EMBL; AY359086; AAQ89444.1; -. HSSP; P03968; IBAR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23 23 M.
209 AA; 22300 MW;
                               AY359086; AAQ89444.1; -. P03968; 1BAR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 209; Conservative
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                                                                                                    Genew; HGNC:3678; FGF21.
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209
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Homo sapiens (Human)
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61 LEIREDGTVGGAADQSPRSILIQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEA 120
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Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
Jones S.J., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MDSDETGFEHSGLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=CS7BL/6J; TISSUE=Pancreas; MEDLINE-23254683; PubMed=1246681; DOI=10.1038/nature01266; MEDLINE-22324683; PubMed=1246681; DOI=10.1038/nature0. H., Kondo S., Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H., Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T. Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J., Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NGBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82.8%; Score 173; DB 2; Length 209; 100.0%; Pred. No. 2.7e-165;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              209 AA; 22284 MW; 27925C43E5167823 CRC64;
                                                                                                                                   and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-UTL-2004 (Rel. 44, Last annotation update)
Pibroblast growth factor-21 precursor (FGF-21)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Pred. ...
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                               SEQUENCE FROM N.A.
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RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S., Balake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S., Gagarda T., Gariboldi M., Gissi C., Godzik A., Gough J., Griboldi M., Gissi C., Godzik A., Gough J., Bak Griboldi M., Gissi C., Godzik A., Gough J., Bara Kanai A., Kawajawa Y., Kedzierski R.M., King B.L., Arani A., Kawajawa Y., Lee Y., Lehmard B., Lyons P.A., Maltais L., Marchianni L., McKenie L., Miki H., Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G., Petroveky N., Pillaia R., Pontius J.U., Qi D., Ramachandran S., Arasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Kingwald M., Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K., Shimana Y., Wagner L., Wahlestett C., Wang Y., Watanabe Y., Walls C., Wang L., Taylor M.S., Teasdiale N., Shimada K., Wagner L., Wahlestett C., Wang Y., Watanabe Y., Walls C., Yuna Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N., Alman Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N., Alma Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N., Alma Z., Zavolan M., Zhu Y., Zimmer A., Rakawa T., Fukuda S., Hirozane-Kishikawa T., Kawai J., Aizawa K., Arakawa T., Fukuda S., Antani, M., Yang I., Yashinagawa A., Sakai A., Yashino M., Waterston R., Lander E.S., Rogers J., R. Birney B., Hayashizaki Y.;
R. Hara A., Hashizuke Y.;
R. Hayashizaki Y.;
R. Malysis of the mouse transcriptome based on functional annotation of R. Oly70 full-length CDNAs.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Datchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Carannor T.L., Scheetz T.E., Brownstein M.J., Usdin T.B., Toshiyuki S., Carannor T.D., Farange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.B., Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.B., Toberzation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the Buropean Bioinformatics Institute. There are no restrictions on its modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and mouse cDNA sequences.", Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-!- SUBCELLULAR LOCATION: Secreted (Potential).
-!- TISSUB SPECIFICITY: Most abundantly expressed in the liver, also expressed in the thymus at lower levels.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
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InterPro; IPR008996; Cytok ILL like.
InterPro; IPR002209; HB/F growthfact.
InterPro; IPR002348; ILL HBGF.
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PRINTS; PR00262; IL1HBGF.
ProDom; PD000831; IL1_HBGF; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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-!- SIMILARITY: Belongs to the heparin-binding growth factors family.
EMBL; AB078901; BAB84299.1; -.
HSSP; 095750; 1PWA.
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                                                                                                                                                                                                                                                                                                                                                                                                                  Length 210;
                                                                                                                                                                                                                                                       29 210 Fibroblast growth factor-21.
210 AA; 23237 MW; AE02AABA6477E6F0 CRC64;
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01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-MAR-2003 (TrEMBLrel. 25, Last annotation update)
Pibroblast growth factor 21.
Name=FGF21;
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Last sequence update)
Last annotation update)
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Pred. No. 1.9e-21;
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Pfam; PP00167; PGP; 1.
                                                                                                                                                                                                                                                                                                                                                                           14.4%; Scc. 100.0%; Pred. No. 
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SMART; SM00442; FGF; 1.
PROSITE; PS00247; HBGF_FGF; FALSE_NEG.
Growth factor; Signal.
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The control of the contro
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SMART; SM00442; FGF; 1.
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PRINTS; PR00262; IL1HBGF.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=20534983; PubMed=11080484; DOI=10.1006/viro.2000.0588; Okamoco H., Nishizawa T., Tawara A., Peng Y., Takahashi M., Kishimoto J., Tanaka T., Miyakawa Y., Mayumi M.; Tanaka T., Miyakawa Y., Mayumi M.; Rigecies-specific Tr viruses in humans and nonhuman primates and their
                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oryza sativa (japonica cultivar-group).
Sukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, Liliopsida, Poales, Poaceae,
Ehrhartoideae, Oryzeae, Oryza.
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Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AP005787; BAD17576.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sasaki T., Matsumoto T., Hattori M., Sakaki Y., Katayose Y.;
Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                           4.8%; Score 10; DB 2; Length 141;
100.0%; Pred. No. 0.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 136;
                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
25-GT-2004 (TrEMBLrel. 28, Last annotation update)
Hypothetical protein P0501E09.24 (Hypothetical protein
Virology 277:368-378(2000).
EMBL; AB041958; BAB19309.2; -.
InterPro; IPRO4118; TT_ORF2.
Pfam; PPC057; TT_ORF2; 1.
SEQUENCE 141 AA; 14433 MW; 90FB7833DBAC0A04 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; AB041959; BAB19312.1; -.
InterPro; IPR004118; TT ORF2.
Brain; PF02957; TT ORF2.1; -.
SEQUENCE 136 AA; 14088 MW; 91C43EEFC5CB22B1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                     (TrEMBLrel. 16, Created)
(TrEMBLrel. 16, Last sequence update)
(TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 4.3%; Score 9; DB 2;
Best Local Similarity 100.0%; Pred. No. 1.8;
Matches 9; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                136 AA
                                                                                                                    Query Match

4.85; ccc.
Best Local Similarity 100.08; Pred. No. 0.10
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Name=P0501E09.24; Synonyms=P0584E12.51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Viruses; ssDNA viruses; Anellovirus.
NCBI_TaxID=68887;
                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     phylogenetic relatedness."
Virology 277:368-378(2000)
                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
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                                                                                                                                                                                                                 163 RFLPLPGLPP 172
                                                                                                                                                                                                                                                      84 RFLPLPGLPP 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          163 RFLPLPGLP 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RFLPLPGLP 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=39947;
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01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                       01-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Name=ORF2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               virus.
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Q9DUCS
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE STRAIN=C2A / ATCC 35395 / DSM 2834;

MEDLINE=21929760; bubMed=11932238; bOI=10.1101/gr.223902;

MA dalagan J.E., Nusbaum C., Roy A., Endrizzi M.G., Macdonald P., FitzHoub W., Calvo S., Engels R., Smirnov S., Atnoor D., Brown A., Allen N., Naylor J., Stange-Thomann N., DeArellano K., Johnson R., Linton L., McEwan P., McKernan K., Talamas J., Tirrell A., Ye W., Linton L., McEwan D.E., Grahame D.A., Guss A.M., Hedderich R., Ingram-Smith C., Kuettner H.C., Krzycki J.A., Law., Lin W., Liu J., Mukhopadhyay B., Revev J.N., Smith K., Springer T.A., Umayam L.A., White O., White R.H., de Macario B.C., Ferry J.G., Jarrell K.P., Jing H., Macario A.J.L., Paulsen I.T., Pritchett W., Sowers K.R., Swanson R.V., Zinder S.H., Lander B., Metcalf W.W., Birren B.; Genome of Methanosacina acetivorans reveals extensive metabolic and physiological diversity."; Genome Res 12:532-542(2002).

The genome Res 12:532-542(2002).

LIUly reversible reaction, thus being able to synthesize principle of prophosphate when the proton motive force is sufficient (By sinial-stry).
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                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10.0CT-2003 (Rel. 42, last sequence update)
25-0CT-2004 (Rel. 45, Last annotation update)
Pyrophosphate-energized proton pump 2 (BC 3.6.1.1) (Pyrophosphate-energized proton pump 2 (BC 3.6.1.1) (Membrane-bound proton-translocating pyrophosphatase 2) (H+-PPase 2) (Membrane-bound Name-hppA2; OrderedLocusNames=MA3880;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- CATALYTIC ACTIVITY: Diphosphate + H(2)O = 2 phosphate.
-!- COFACTOR: Magnesium (By similarity).
-!- SUBUNIT: Homodimer (Potential).
-!- SUBCELLULAR LOCATION: Integral membrane protein (Probable).
-!- SIMILARITY: Belongs to the H(+)-translocating pyrophosphatase (TC 3.A.10) family. Subfamily 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HAMAÞ; MF_01130; -; 1. interpretar interpretar interpretar i TRO004131; H PPase.
Pfam; PF03030; H PPase; 1.
PIRSF; PIRSF001265; H+-PPase; 1.
COMPLETE PROTECOME; V PPase; 1.
TGRPAMS; TIGR01104; V PPase; 1.
TGRPAMS; TIGR01104; V PPase; 1.
Transmembrane.
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Methanosarcinaceae; Methanosarcina.
                                                                                                                                                           Length 157;
                                                                                                                                                                                                                                  0; Indels
EMBL; AP005591; BAD17409.1; -.
Hypothetical protein.
SEQUENCE 157 AA; 16544 MW; 9F9A97BB5BD05B18 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     671 AA
                                                                                                                                                       4.3%; Score 9; DB 2
100.0%; Pred. No. 2;
ative 0; Mismatches
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10-OCT-2003 (Rel. 42, Last seq
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Methanosarcina acetivorans.
                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                  30 PIPDSSPLL 38
                                                                                                                                                                                                                                                                                                                                                                                      22 PIPDSSPLL 30
                                                                                                                   Query Match
Best Local Similarity
9; Conserv?
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PREDILINEEZZBUZZBU; PUDMEGLABOU'BZ; DUJ=10.1073/pnama.183124100;
RA Antonio R.V., Almeida P.C., de Almeida D.F., Hungria M., Gulmaraea C.T.,
RA Antonio R.V., Almeida F.C., de Almeida R., Araripe J., de Araujo M.F.F.,
RA Astolfi-Filho S., Azevedo V., Baptista A.J., Bataus L.A.M.;
RA Astolfi-Filho S., Azevedo V., Baptista A.J., Bataus L.A.M.;
RA Astolfi-Filho S., Azevedo V., Baptista A.J., Burity H.A.,
RA Gamargo A.A., Cardeso D.D.P., Carneiro C.M., Brocchi M., Burity H.A.,
RA Camargo A.A., Cardeso D.D.P., Carneiro N.P., Carraro D.M.O.,
RA Carczynski-Pasa T.B., Cunha-Junior N.C., Fagundes N., Falcao C.L.,
RA Fantinatti F., Farias I.P., Felipe M.S.S., Ferrari L.P., Ferro J.A.,
RA Fartinatti F., Franco G.R., Freitas N.S.A., Furlan L.R.,
RA Grattapaglia D., Grisard E.C., Hanna B.S., Jardim S.N., Laurino J.,
RA Grattapaglia D., Grisard E.C., Hanna B.S., Jardim S.N., Laurino J.,
RA Grattapaglia D., Grisard E.C., Hanna B.S., Jardim S.N., Laurino J.,
RA Madeira H.M.F., Manfio G.P., Maranhao A.O., Martins W.S.,
A in Muro S.N.Z., de Medeiros S.R.B., Meissner R.V., Moreira J.O.,
RA Paixao R.F.C., Parente J.A., Pedrosa F.O., Pena S.D.J., Pereira J.O.,
RA Ramalho-Neto C.S., Reis A.M., Rigo L.U., Rondinelli B.,
Santos B.B.P., Santos F.R., Schneider M.P.C., Seuanez H.N.,
Saltva A.M.R., da Silva A.M.R., Silva D.W., Silva R., Simon D., Soares C.M.A., Soares R.B.A., Souza R.M., Souza K.R.L.,
RA Vertore A., Wassem R., Simpson A., Silmon D., Soares C.M.A., Scares R.B.A., Souza R.N., Souza R. R., Shorn P. Teixeira J. A.
Why Complete M. R., Steindel M., Teixeira S.R., Urmenyi T.,
Why Chanlete R. Massen R. S.A., Suuta R. S., Suran P. W., Soluza R. R., Shorn R. M. R., Massella R. R., Souza R. S., Virtumenyi T.,
Why Chanlete R. R. Massen R. R. S., Suutan R. S., Suran R. M., Saltan R. M., S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The complete genome sequence of Chromobacterium violaceum reveals remarkable and exploitable bacterial adaptability.";

Proc. Natl. Acad. Sci. U.S.A. 100:11660-11665(2003).

1- SIMILARITY: Contains HTH tetR-type DNA-binding domain.

EMBL; AR016916; AA059511.1; -.

GO; GO:0003700; F:transcription factor activity; IEA.

GO; GO:000535; P:transcription of transcription, DNA-dependent; IEA.

InterPro; IPR001647; HTH_TetR.
                                                                                                                                 SEQUENCE FROM N.A.
STRAIN-ATCC 12472 / DSM 30191;
MEDLINE-22882880; PubMed=14500782; DOI=10.1073/pnas.1832124100;
Bacteria; Proteobacteria; Betaproteobacteria; Neisseriales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
Phyllobacteriaceae; Mesorhizobium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 220;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRINTS; PR00455; HTHTER.
Complete proteome; DNA-binding; Transcription;
Transcription regulation.
SEQUENCE 220 AA; 23672 MW: 200777511011007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.8%; Score 8; DB 2;
100.0%; Pred. No. 28;
tive 0; Mismatches
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OrderedLocusNames=mlr2632;
Rhizobium loti (Mesorhizobium loti)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
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STRAIN=MARP303099;

MEDLINE=21082930; PubMed=11214968;
                                    Chromobacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (TrEMBLrel. 18,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pfam; PF00440; TetR N;
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Best Local Similarity
Matches 8; Conserv
                                                                NCBI_TaxID=536;
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Q98100
SOW SERVICE TO THE SERVICE SER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Determinant of potassium independence (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=PG1;
PubMed=14762060; DOI=10.1101/gr.1673304;
Webtberg J., Persson A., Holmberg A., Goesmann A., Lundeberg J.,
Webtberg J., Pertersson B., Uhlen M.;
"The genome sequence of Mycoplasma mycoides subsp. mycoides SC type
strain PG1T, the causative agent of contagious bovine pleuropneumonia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Hypothetical transmembrane protein.
OrderediocusNames-MSC 0660;
Mycoplasma mycoides (Subsp. mycoides SC).
Bacteria: Firmicutes; Mollicutes; Mycoplasma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.3%; Score 9; DB 1; Length 671;
.00.0%; Pred. No. 7.4;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 51;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    similarity).
45E43BD57F4B30F7 CRC64;
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Complete proteome.
SEQUENCE 51 AA; 5726 MW; ACE712AD7AFA6F7C CRC64;
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01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Probable transcriptional regulator, TetR family.
OrderedLocusNames=CV1837;
Chromobacterium violaceum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.8%; Score 8; DB 2;
100.0%; Pred. No. 7.4;
ive 0; Mismatches
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Potential
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Genome Res. 14:221-227(2004).
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Matches 9; Conservative
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491 VLAGLLLGA 499
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Best Local Similarity
Matches 8; Conserv
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05-JUL-2004 (
05-JUL-2004 (
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96MSV7
1D 06MSV7
AC 06MSV7
DT 05-JI
DT 
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OrderedLocusNames=glr2438;
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Kaneko T., Nakamura Y., Sato S., Asamizu E., Kato T., Sasamoto S., Watanabe A., Idesawa K., Ishikawa A., Kawashima K., Kimura T., Kishida Y., Kiyokawa C., Kohara M., Matsumoto M., Matsuno A., Mochizuki Y., Nakayama S., Nakazaki N., Shimpo S., Sugimoto M., Takeuchi C., Yamada M., Tabata S., "Complete genome structure of the nitrogen-fixing symbiotic bacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
glucosyltransferase).
Name=P0470D12.134;
Oryza sativa (japonica cultivar-group).
Rukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzeae; Oryza.
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Sasaki T., Matsumoto T., Yamamoto K.;
"Oryza sativa nipponbare(GA3) genomic DNA, chromosome 7, PAC
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100.0%; Pred. No. 55;
cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.8%; Score 8; DB 2; Length 301;
100.0%; Pred. No. 37;
ive 0; Mismatches 0; Indels
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Glycosyltransferase; Transferase.
SEQUENCE 474 AA; 50978 MW; EEA1782C26B35E21 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                 301 AA; 31470 MW; C7E91DB86D02658B CRC64;
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Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        474 AA.
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                                                                                                                                                                                      Mesorhizobium loti.",
DNA Res. 7:31-338 (2000).
EMB. APR03000; BAB49716.1; -.
GO; GO:0016020; C:membrane; IEA.
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                                                                                                                                                                                                                                                                                                        InterPro; IPR00620; DUF6.
Pfam; PF00892; DUF6; 2.
Complete proteome.
SEQUENCE 301 AA; 31470 N
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Best Local Similarity 100...
Si Conservative
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Matches 8; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 LAGLLICA 129
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gramene; Q8H462; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  clone: P0470D12."
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Q8H462
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      S WAR REAL TRANSPORTED BY SERVICE SERV
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
STRAIN-BIOLYPOE gravis / NCTC 13129;
MEDLINE-22965443; PubMed=14602910; DOI=10.1093/nar/gkg874;
MEDLINE-22965443; PubMed=14602910; DOI=10.1093/nar/gkg874;
Cerdeno-Tarraga A.-M., Efstratiou A., Dover L.G., Holden M.T.G.,
Pallen M.J., Bentley S.D., Besra G.S., Churcher C.M., James K.D.,
De Zoyas A., Chillingworth T., Cronin A., Dowd L., Feltwell T.,
Hamlin N., Holroyd S., Jagels K., Moule S., Quail M.A.,
Rabbinowitsch E., Rutherford K.M., Thomson N.R., Unwin L.,
Whitehead S., Barrell B.G., Parkhill J.;
The complete genome sequence and analysis of Corynebacterium
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales; Corynebacterineae; Corynebacteriaceae; Corynebacterium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.8%; Score 8; DB 2; Length 493; 100.0%; Pred. No. 57; trive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRINTS; PROUBLI; BCTERIALGSPD.
Complete proteome; Transport.
SEQUENCE 493 AA; 51946 MW; 5893096AADAF9COC CRC64;
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Bacteria; Cyanobacteria; Chroococcales; Gloeobacter.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Putative membrane protein.
OrderedLocusNames=DIP1941;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diphtheriae NCTC13129.";
Nucleic Acids Res. 31:6516-6523(2003).
EMBL; BX248359; CAR56475.1; -
GO; GO:0016021; C:integral to membrane; IEA.
GO; GO:0005215; F:transporter activity; IEA.
GO; GO:0006810; P:transport; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 499 AA
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Pfam; PF03958; Secretin N;
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PROSITE; PS50850; MFS; 1.
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Best Local Similarity 100.
Matches 8; Conservative
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SEQUENCE 499 AA;
                 NCBI_TaxID=33072;
                                                                            SEQUENCE FROM N.A.
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MEDIINE=22603106; PubMed=12692562;
Keda H., Ishikawa J., Hanamoco A., Shinose M., Kikuchi H., Shiba T., Sakaki Y., Hattori M., Omura S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Complete genome sequence and comparative analysis of the industrial microorganism Streptomyces avermitilis.";
Nat. Biotechnol. 21:226-531(2003).
EMBL; APO05037; BAC1772.1; ...
GO; GO:0016021; C:integral to membrane; IEA.
InterPro; IPR000169; Pept. cys acsite.
PROSITE; PS00639; THIOL_PROTEASE_HIS; UNKNOWN_1.
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MEDLINE=21477403; PubMed=11572948; DOI=10.1073/pnas.211433198;
Omura S., Ikeda H., Ishikawa J., Hanamoto A., Takahashi C.,
Shinose M., Takahashi Y., Horikawa H., Nakazawa H., Osonoe T.,
Kikuchi H., Shiba T., Sakaki Y., Hattori M.;
"Genome sequence of an industrial microorganism Streptomyces
avermitilis: deducing the ability of producing secondary
metabolites.",
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Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Streptomycineae; Streptomycetaceae; Streptomyces.
NCBI_TaxID=33903;
Query Match 3.8%; Score 8; DB 2; Length 499; Best Local Similarity 100.0%; Pred. No. 58; Matches 8; Conservative 0; Mismatches 0; Indels
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100.0%; Pred. No. 60;
tive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2004 (TrEMBLrel. 26, Last annotation update)
Putative ABC transporter transmembrane protein.
OrderedLocusNames=SAV4060;
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SEQUENCE 523 AA; 55097 MW; 6;
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Matches 8; Conservative
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70 VLAGLLLG 77
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Search completed: July 8, 2005, 22:47:55 Job time : 181 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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OM protein - protein search, using sw model

July 8, 2005, 22:03:50 ; Search time 3.6875 Seconds (without alignments) 391.390 Million cell updates/sec Run on:

US-10-060-765-8 89 Perfect score:

1 HLPGNKSPHRDPAPR 15 Sequence:

Gapop 10.0 , Gapext 0.5 **BLOSUM62** Scoring table:

283416 seqs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 79:*
1: pirl:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES	Description	T31421 C-terminal domain	372619 hypothetical prote	C72417 sugar kinase, FGGY		A60006 coat protein VP1	VCPVNA coat protein VP1		S32436 collagen alpha 2	T48349 EIN2 protein - Ara	S46151 probable purine nu		S35703 colony-stimulating	A31401 macrophage colony		C72631 hypothetical prote	probable alde	S25841 beta-ketoacyl synt	JC4335 anti-mullerian hor		T41551 hypothetical prote	collagen alph			3-isopropylma		2QCV6 hypothetical prote	inclusion bod		S41627 probable anti-mut
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di	Query Match	58.4	56.2	53.9	51.7	51.7	51.7	50.6	50.6	20.6	50.0	49.4	49.4	49.4	49.4	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3	47.2	47.2	47.2	47.2	47.2		7./5
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proline-rich prote gag-like protein p	hypothetical prote lmbl protein - Str	gag polyprotein - gag polyprotein - gag protein - bovi	related to suppres hypothetical prote	hypothetical prote hypothetical 13.2K	hypothetical prote US10 protein - hum	isoleucine-tRNA li hypothetical prote	
T02436 T13172	C86194 S44956	FOLJGA FOLJGB S29356	T49868 H82597	T47161 S54309	A85076 QQBE07	T31663 OOCV6C	JN0498
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4 4 2 2 2	41.5	4 4 4 5 7 5 7 8 7 8 7	41.5	41	4 4	414	41
30	33.5	20 20 40 40 70 40	37 38	39 40	417	4 4 6 4	45

## ALIGNMENTS

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C-terminal domain-binding protein rAl - rat
C;Species: Rattus norvegicus (Norway rat)
C;Species: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 09-Jul-2004
C;Accession: T31421
A;Reference number: Z21024; MUID:96293459; PMID:8692929
A;Accession: T31421
                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-1173 exURS
A;Residues: 1-1173 exURS
A;Cross-references: UNIPROT:063624; EMBL:U49056; NID:g1438531; PID:g1438532; PIDN:AAC526
A;Experimental source: hippocampus
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Gaps ö Score 52; DB 2; Length 1173; Pred. No. 5.9; 2; Mismatches 2; Indel8 Query Match
Best Local Similarity 66:7%;
Matches 8; Conservative 2

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224 PGDDSPHREPPP 235 3 PGNKSPHRDPAP 14 ò 셤

hypothetical protein APE1416 - Aeropyrum pernix (strain K1)

C;Species: Aeropyrum pernix C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jul-2004

C;Accession: G72619
R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; Takah awa, H.; Takamya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; K DNA Res. 6, 83-101, 1999
A;Title: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, Aeropyx A;Reference number: A72450; MUID:99310339; PMID:10382966

A;Status: preliminary A;Molecule type: DNA

A;Residues: 1-165 <KAW>

C,Genetics:

A;Cross-references: UNIPROT:Q9YC35; DDBJ:AP000061; NID:g5104821; PIDN:BAA80413.1; PID:d1 A;Experimental source: strain K1

A;Gene: APE1416 C;Superfamily: Aeropyrum pernix hypothetical protein APE1416

Length 165; 3; Indels Query Match 56.2%; Score 50; DB 2; Best Local Similarity 68.8%; Pred. No. 1.5; Matches 11; Conservative 0; Mismatches

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Gaps

7

2 LPGNK--SPHRDPAPR 15

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Gaps

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C;Superfamily: parvovirus coat protein
K;Kwywodas coat protein; glycoprotein
F;151-729/Product: coat protein VP2 #status predicted <VP2>
F;115,198,282,330,433,471,573,604,651/Binding site: carbohydrate (Asn) (covalent) #statu:
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CiSpecies: porcine parvovirus
CiSpecies: porcine parvovirus
CiSpecies: porcine parvovirus
CiSpecies: porcine parvovirus
CiAccession: B33743; D48472
Rivalogy 173, 586-377, 1989
A;Title: Nucleotide sequence analysis of the capsid genes and the right-hand terminal pa A;Reference number: A33743; MUID:90085785; PMID:2596019
A;Referente type: DNA
A;Recule type: DNA
A;Residues: 1-729 <VAS>
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Keywords: coat protein; glycoprotein
F;151-729/Product: coat protein VP2 #status predicted <VP2>
F;32,172,198,282,330,433,471,573,604,651/Binding site: carbohydrate (Asn) (covalent) #st
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Psparkhill, J; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, M.B. deno-Tarraga, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, G.; il, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrell, Il, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrell, Algurue 413, 523-527, 2001
A;Title: Genome sequence of Yersinia pestis, the causative agent of plague.
A;Reference number: AB0001; MUID:21470413; PMID:11586360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A,Cross-references: UNIPROT:P18546; GB:M32787; NID:G332983; PIDN:AAA46917.1; PID:g332985
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Virology 197, 86-98, 1993
A;Title: Genomic organization and mapping of transcription and translation products of
A;Reference number: A48472; MUID:94025514; PMID:8212598
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C,Species: Yersinia pestis
C,Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Residues: 11-729 <BER>
A;Experimental source: NADL-2, ATCC VR-742
A;Note: sequence extracted from NCBI backbone (NCBIN:138789, NCBIP:138794)
                           A;Title: Nucleotide sequence of capsid protein gene of porcine parvovirus. A;Reference number: A60006; MUID:89319168; PMID:2750278
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                                                                                                                                                                                                                                                                                                                                                                                       Length 729;
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Pred. No. 30;
2; Mismatches
                                                                                           A,Accession: A60006
A,Molcoule type: DNA
A,Residues: 1-729 <28X×
A,Cross-references: UNIPROT:P33484
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61.5%;
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|117 PGSKPPGKRPAPR 129
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Best Local Similarity 61.5.
Best Local 8; Conservative
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A,Title: Evidence for lateral gene transfer between Archaea and Bacteria from genome seq A,Title: Evidence for lateral gene transfer between Archaea and Bacteria from genome seq A,Reference number: A72200; MUID:99287316; PMID:10360571

A,Status: preliminary
A,Status: preliminary
A,Residues: 1-492 <ARN>
A,Residues: 1-492 <ARN>
A,Residues: UNIPROT:09WXX1; GB:AE001697; GB:AE000512; NID:G4980597; PIDN:AAD3521
A,Status: prelimental source: strain MSB8
C,Genetics:
A,Gene: TM0116
C,Superfamily: xylulokinase
                                                                                                                                                                                   sugar kinase, FGGY family - Thermotoga maritima (strain MSB8)
C;Species: Thermotoga maritima
C;Species: Thermotoga maritima
C;Species: Thermotoga maritima
C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004
C;Accession: C72417
R;Nelson, K.E.; Clayton, R.A.; Gill, S.R.; Gwinn, M.L.; Dodson, R.J.; Haft, D.H.; Hickey Garrett, M.M.; Stewart, A.M.; Cotton, M.D.; Pratt, M.S.; Phillips, C.A.; Richardson, D.;
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Coat protein VP1 - porcine parvovirus

N.Contains: coat protein VP2

C.Specials: porcine parvovirus

C.Saccesion: B3302

R.Ranz, A.I.; Manchus, J.J.; Diaz-Aroca, E.; Casal, J.I.

J. Gen. Virol. 70, 2541-2553, 1989

A.Title: Porcine parvovirus: DNA sequence and genome organization.

A.Reference number: A33302; MUID: 90010964; PMID: 2794971

A.Accession: B33302

A.Molecule type: DNA

A.Accession: B3302

C.Genetics: C.Superfamily: parvovirus coat protein

C.Superfamily: parvovirus coat protein

F:145-723/Product: coat protein
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N;Contains: coat protein VP2
C;Species: porcine parvovirus
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
C;Accession: A60006
R;Sakurai, M.; Nishimori, T.; Ushimi, C.; Nakajima, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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Pred. No. 30;
2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 492;
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7
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Pred. No.
Query Match 51.7%;
Best Local Similarity 61.5%;
Matches 8; Conservative
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340 YLNGERTPHRDPFAR 354
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Best Local Similarity 53.3.
Best Local 8; Conservative
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A;Residues: 1-1294 <BEV>
A;Cross-references: UNIPROT:Q9S814;
                                                                                                              EIN2 protein - Arabidopsis thaliana
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61.5%;
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A;Map position: 2R
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HLKTSKSPH-DAAPR
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                                                                                                                                                                                                                                                                                                                                                                              A; Reference number: Z24492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Status: preliminary A; Molecule type: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession: T48349
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A; Residues: 123-133. P.,135-137 < DIA>
C; Comment: Prolines and lysines at the third position of the tripeptide repeating unit c d and subsequently O-glycosylated.
C; Comment: Prolines and lysines at the third position of the tripeptide repeating unit c d and subsequently O-glycosylated.
C; Genetics:
A; Genetics:
A; Genetics:
A; Genetics:
A; Genetics:
A; Genetics:
C; Complex: type IX collagen may be a heterotrimer of one alpha 1(IX) chain, one alpha 2(C; Complex: type IX collagen may be a heterotrimer of one alpha 1(IX) chain, one alpha 2(C; Function: structural component of extracellular fibrous polymer associated with type (C; Function: structural component of extracellular fibrous polymer associated with type (C; Function: structural component of extracellular fibrous polymer associated with type (C; Function: structural component of extracellular fibrous polymer associated with type (C; Function: structural component Of Extracellular fibrous predicted <COL3>
F;1114/Domain: collagenous COL3 (fragment) #status predicted <COL3>
F;471-500/Domain: non-collagenous COL2 #status predicted <COL3>
F;471-500/Domain: collagenous COL1 #status predicted <COL3>
F;50-6:50/Domain: collagenous COL1 #status predicted <COL1>
F;60-6:50/Domain: collagenous COL2 #status predicted <COL1>
F;60-6:50/
                           A, Status: preliminary
A, Molecule type: DNA
A, Residues: 1-517 «KUR»
A, Cross-references: UNIPROT: Q8ZGKO; GB: AL590842; PIDN: CAC90122.1; PID: g15979342; GSPDB: G, Genetics:
C, Genetics:
A, Genetics:
YP01291
C, Superfamily: xylulokinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Species: Homo sapins (man)
C;Species: Homo sapins (man)
C;Species: Homo sapins (man)
C;Date: 30-Sep-1993 #sequence revision 30-Sep-1993 #text_change 15-Sep-2003
C;Date: 30-Sep-1993 #sequence revision 30-Sep-1993 #text_change 15-Sep-2003
C;Accession: S32436; S34487; S64673
R;Peraclae, M.; Haenninen, M.; Haestbacka, J.; Elima, K.; Vuorio, E.
FEBS Lett. 319, 177-180, 1993
R;Peraclae moler: S32436
A;Accession: Man
A;Residues: 1-618 < PER.>
A;Cross-references: EMBL:M95610; NID:g1054872
A;Cross-references: EMBL:M95610; NID:g1054872
A;Cross-references: EMBL:M95610; NiD:g1054872
A;Cross-references: EMBL:M95610; NiD:g1054872
A;Accession: Molecular cloning of the human alpha-2 (IX) collagen cDNA and assignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A) Description: structural component of extracellular fibrous polymer associated with type cykeywords: chondroitin sulfate proteoglycan; coiled coil; extracellular matrix; glycopr cylonatin: collagenous COL3 (fragment) #status predicted <COL3>
F):114-10main: collagenous NC3 #status predicted <NC3>
F):12-131/Domain: non-collagenous NC3 #status predicted <NC3>
F):17-500/Domain: non-collagenous COL2 #status predicted <COL2>
F):17-500/Domain: collagenous COL1 #status predicted <COL2>
F):1616-618/Domain: collagenous NC1 [fragment] #status predicted <COL1>
F):120/Binding site: chondroitin sulfate (Ser) (covalent) #status predicted ::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: mRNA
A;Residues: 1-26, 07', 20', S', 31-32', LM', 35-561, 'L', 563-578,'P', 580-618 <PBR2>
A;Cross-references: EMBL:195610; NID:g1054872
A;Cross-references: EMBL:195610; NID:g1054872
R;Diab, M.; Wu, J.J.; Eyre, D.R.
Biochem J. 314, 327-312, 1996
Biochem J. 314, 327-312, 1996
A;Title: Collagen type IX from human cartilage: a structural profile of intermolecular
A;Reference number: 864673; MUID:96195147; PMID:8660302
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Pred. No. 36;
1; Mismatches 5
                                                                                                                                                                                                                                                                                                                                   Query Match 50.6%; Score 45; DB Best Local Similarity 53.3%; Pred. No. 30; Matches 8; Conservative 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             collagen alpha 2(IX) chain - human (fragment)
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Best Local Similarity
Matches 7; Conserv
A; Accession: AG0157
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NiAlternate names: protein F12E4.10
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: Jo-Apr-2000 #sequence_revision 20-Apr-2000 #text_change 09-Jul-2004
C;Accession: T48349
R;Bevan, M.; Pohl, T.; Weizenegger, T.; Bancroft, I.; Mewes, H.W.; Rudd, S.; Lemcke, K.; submitted to the Protein Sequence Database, March 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A,Residues: 1-545 (AIG>
A,Cross-references: UNIPROT:P38346; EMBL:Z36139; NID:g536704; PID:g536705; GSPDB:GN00002
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R; Adgle, M.; Baclet, M.C.; Barthe, C.; Biteau, N.; Crouzet, M.; Doignon, F.
submitted to the Protein Sequence Database, August 1994
A; Reference number: 545940
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C;Species: Glydine max (soybean)
C;Species: 09-Apr-1999 #sequence_revision 09-Apr-1999 #text_change 09-Jul-2004
C;Accession: T05726
C;Accession: T05726
S;Hagen, G.; Gullfoyle, T.J.
submitted to the EMBL Data Library, July 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N;Alternate names: hypothetical protein YBR1738
C;Species: Saccharomyces cerevisiae
C;Date: 26-Aug-1994 #sequence_revision 09-Sep-1994 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1294;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: UNIPROT:Q9S814; EMBL:AL162751
A;Experimental source: cultivar Columbia; BAC clone F12E4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Genetics:
A;Map position: 5
A;Introns: 83/3; 112/3; 149/3; 220/3; 282/3; 1169/3
A;Note: F1284.10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
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Pred. No. 37;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB
77;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 45;
Pred. No.
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A;Molecule type: mRNA
A;Molecule type: mRNA
A;Residues 1.5; Nr,7-245,'A',247-552 <DEL>
R;Ben-Avram, C.M.; Shively, J.E.; Shadduck, R.K.; Waheed, A.; Rajavashisth, T.; Lusis, A
Proc. Natl. Acad. Sci. U.S.A. 82, 4486-4489, 1985
A;Reference number: A23166, MUID:85242709; PMID:3925458
A;Accession: A23166
A;Molecule type: protein
                                                                                                                                                                                                                                                                                                             A;Residues: 33-39, CC',42-57 <BEN>
R;Rajavashisth, T.B.; Eng, R.; Shadduck, R.K.; Waheed, A.; Ben-Avram, C.M.; Shively, J.E
R;Rajavashisth, T.B.; Eng, R.; Shadduck, R.K.; Waheed, A.; Ben-Avram, C.M.; Shively, J.E
R;C.; Natl. Acad. Sci. U.S.A. 84, 1157-1161, 1987
A;Title: Cloning and tissue-specific expression of mouse macrophage colony-stimulating f. A;Reference number: A25883; MUID:87147232; PMID:3493488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Cross-references: UNIPROT: P53529; EMBL: U00021; NID: 9467141; PIDN: AAA50916.1; PID: 94671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hypothetical protein APB1506 - Aeropyrum pernix (strain K1)
C;Species: Aeropyrum pernix
C;Species: Aeropyrum pernix
C;Species: D0-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jul-2004
C;Accession: C75631
R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; Takah, awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Vamazaki, J.; Kodoh, Res. 6, 83-101, 1999
A;Title: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, Aeropynakieference number: A72450; MUID:99310339; PMID:10382966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Mycobacterium leprae
C;Date: 19-Mar-1997 #sequence_revision 25-Apr-1997 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Residues: 1-2,4-5, YRPR',9-100 <RAJ>
A;Cross-references: GB:M15692; NID:g192800; PIDN:AAA37480.1; PID:g192801
C;Superfamily: macrophage colony-stimulating factor
C;Keywords: cytokine; glycoprotein; growth factor; macrophage
F;1-32/Domain: signal sequence #status predicted <SIG>F;33-52/Product: macrophage colony-stimulating factor #status predicted
F;154,172/Binding site: carbohydxate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 590;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        49.4%; Score 44; DB 1; Length 552; 58.3%; Pred. No. 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
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49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C,Accession: S72961
R,Smith, D.R., Robison, K.
submitted to the EMBL Data Library, November 1993
A,Description: Mycobacterium leprae cosmid L247.
A,Reference number: S72589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. 45;
2; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         567 HLPNSSNOHRDGVERSFPAP 586
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      202 PASASPHOPPAP 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 58.3
Matches 7; Conservative
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C,Superfamily: CTP synthase
C,Keywords: ligase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 9; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A, Molecule type: mRNA
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A31401

Macrobage colony-stimulating factor precursor - mouse
NyAlternate names olony-stimulating factor 1; M-CSF
C;Species: Mus macrolus (house mouse)
C;Species: Mus macrolus (house mouse)
C;Accession: A31401; JN0294; Ā26575; A23166; A25883
C;Accession: A31401; JN0294; Ā26575; A23166; A25883
R;Addner, M.B.; Martin, G.A.; Nobbe, J.A.; Wittman, V.P.; Warren, M.K.; McGrogan, M.; St
Rroder Coloning and expression of murine macrophage colony-stimulating factor from
A;Reference number: A31401
A;Molecule type: mRNA
A;Residues: 1-552 cLAD>
A;Cross references: UNIPROT:P07141; GB:M21952; GB:J03862; NID:g192804; PIDN:AAA37481.1;
R;Harrington, M.A.; Edenberg, H.J.; Saxman, S.; Pedigo, L.M.; Daub, R.; Broxmeyer, H.E.
Gene 102, 165-170, 1991
A;Reference number: JN0294
A;Residues: 1-13 cHAR>
A;Residues: 1-13 cHAR>
A;Reference number: JN0294
A;Residues: 1-13 cHAR>

A, Reference number: 215436
A; Accession: T05726
A; Accession: T05726
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: mRnay
A; Residues: 1-339 < HAG>
A; Cross-references: UNIPROT: 022465; EMBL: AF016633; NID: 92388688; PIDN: AAB70005.1; PID: 92
A; Cross-references: cultivar Wayne
C; Generics:
A; Gene: GH1
C; Superfamily: auxin-induced protein aux28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pog
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S35703
colony-stimulating factor - rat
cylopedies: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
R;Borycki, A.G.; Lenormand, J.L.; Guillier, M.; Leibovitch, S.A.
Biochim: Blophys. Acta 1174, 143-152, 1993
A;Ptile: Isolation and characterization of a cDNA clone encoding for rat CSF-1 gene. PA;Accession: S35703
A;Accession: S35703
A;Accession: S35703
A;Accession: S35703
A;Residues: 1-552 <-BOR>
A;Residues: 1-552 <-BOR>
A;Crose-references: EMBL:M84361; NID:g203640; FIDN:AAA03032.1; PID:g203641
C;Superfamily: macrophage colony-stimulating factor
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Pred. No. 45;
2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Length 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                        49.4%; Score 44; DB 63.6%; Pred. No. 27;
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Best Local Similarity 58.3%;
Matches 7; Conservative
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PASASPHQPPAP 213
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Matches 7; Conserv
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Gaps

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Gaps

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A,Status: preliminary
A,Molecule type: DNA
A,Residues: 1-105 <KAW>
A,Residues: 1-105 <KAW>
A,Cross-references: UNIPROT:09YBU3; DDBJ:AP000061; NID:g5104821; PIDN:BAA80505.1; PID:d1
A,Experimental source: strain K1
C;Geneits:
A,Gene: APBI506
                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                    Query Match
48.3%; Score 43; DB 2; Length 105;
Best Local Similarity 58.3%; Pred. No. 11;
Matches 7; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                            1 HLPGNKSPHRDP 12
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56 HLPNNKASHKLP 67
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version :
- 2005 (
GenCore
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OM protein - protein search, using sw model

8, 2005, 21:54:48; Search time 18.0625 Seconds (without alignments) 425.256 Million cell updates/sec July Run on:

US-10-060-765-8 89

1 HLPGNKSPHRDPAPR 15 Perfect score: Sequence: BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

1612378 seqs, 512079187 residues

1612378 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Q9nsal homo sapien	Q8n683 homo sapien	Q63624 rattus norv	Q9yc35 aeropyrum p	-	_			Q6sla5 gibberella	oryza		Q9trz5 oryctolagus	_	_	Q63vc3 burkholderi		P52501 porcine par		Q6ps59 porcine par		xylella	Q6z3n2 oryza sativ	-	Q69iv1 oryza sativ	Q6uuml oryza sativ	_		_	-		Q8zgk0 yersinia pe
SUMMARIES	ID	FGFL HUMAN	Q8N6 <u>8</u> 3	Q63624	Q9YC35	Q9SSY2	Q9WXX1	Q9BLT0	SYO_RHOBA	O6SLA5	Q6ZB15	Q7YRK8	Q9TRZ5	Q69LM3	Q62FI0	Q63VC3	COA1_PAVP9	COA1_PAVPK	COA1_PAVPN	Q6PS <u>5</u> 9	Q6TPD7	Q87DB2	Q6Z3N2	Q6BQS4	Q691V1	QGUUM1	Q7XY38	Q7U8Z9	Q9L115	Q6FYA2	Q66CS9	Q8ZGK0
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di	Query Match	100.0	100.0	58.4	56.2	53.9	53.9	53.9	53.9	53.9	52.8	52.8	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	50.6	50.6	50.6	20.6	50.6	50.6	20.6	20.6	50.6	20.6	50.6
	Score	89	89	52	20	48	48	48	48	48	47	47	46	46	46	46	46	46	46	46	46	45	45	45	45	45	45	45	45	45	45	45
	Result No.	-	7	e	4	Ŋ	9	7	80	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29,	30	31

Q74vk5 yersinia pe Q76em4 gluconobact	Q14055 homo sapien Q6ux38 homo sapien	071fus homo sapien 086x52 homo sapien	Q9y2j5 homo sapien O9s814 arabidopsis	Q8t917 toxoplasma Q67th2 symbiobacte	P38346 saccharomyc	Q814g8 oryza sativ Q93jd6 streptomyce	•
Q74VK5 Q76EM4	CA29 HUMAN QGUX38	Q7LFUS Q86X52	Q9Y2J5 Q9S814	Q8T9L7 Q67TH2	YB90 YEAST	Q814G8 Q93JD6	Q6YWK9
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50.6	50.6	50.6	50.6	50.6	50.0	50.0 49.4	49.4
45	45 45	4 5 5	4 4 2 5	45	44.5	44.5 44	44
32	34 35	36	8 6	4 4	42	4 4 4 4	45

# ALIGNMENTS

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                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003; MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003; MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003; Clark H.F., Gurney A.L., Abayas B., Baker K., Baldwin D., Brush J., Chow B., Chuni C., Crowley C., Currell B., Dowd P., Baton D., Foster J., Grimaldi C., Gu Q., Hass P.E., Heldens S., Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J., Sanchez C., Schoenfeld J., Seshagiri S., Simmons L., Santh V., Stinson J., Vagts A., Vandlen R., Watanabe C., Wieand D., Woods K., Xie M.-H., Yansura D., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I., Godowski P., Gray A.; "The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a
                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. MEDIMED-10858549; DOI=10.1016/S0167-4781(00)00067-1; MEDILINE-20461777; Pubbmed=10858549; DOI=10.1016/S0167-4781(00)00067-1; Nighlimura T., Nakatake Y., Konishi M., Itoh N.; "Identification of a novel FGF, FGF-21, preferentially expressed in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Protein Sci. 13:2819-2824(2004).
-1- SUBCELLULAR LOCATION: Secreted (Potential).
-1- SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                               16-OCT-2001 (Rel. 40, Last sequence update)
25-JAN-2005 (Rel. 46, Last annotation update)
Fibroblast growth factor-21 precursor (FGF-21) (UNQ3115/PRO10196)
                                                                                                                                                                           Craniata; Vertebrata; Buteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pubbed=15340161; DOI=10.1110/ps.04682504;
Zhang Z., Henzel W.J.;
"Signal peptide prediction based on analysis of experimentally
209 AA
                                                                                                                                                                                                                                                                                                                                                                           Biochim. Biophys. Acta 1492:203-206(2000).
  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               bioinformatics assessment.";
Genome Res. 13:2265-2270(2003).
                                             (Rel. 40, Created)
                                                                                                                                                                    Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    verified cleavage sites."
  STANDARD;
                                                                                                                                                      Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 29-43.
                                                                                                                                                                                                                           NCBI_TaxID=9606;
                                             16-OCT-2001
  HUMAN
    FGFL HUM
Q9NSA1;
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PRT; 1173 AA
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                                                                                                                                                                                                                                                                  100.08;
                                                                                                                                                                                                                                                                                     100.08;
                                                                                                                                                                                                                                                                                                                                                              145 HLPGNKSPHRDPAPR 159
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                                                                                                                                                                                                                                                                                                                                      1 HLPGNKSPHRDPAPR 15
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                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.
Matches 15; Conservative
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Best Local Similarity 66.7
Matches 8; Conservative
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SEQUENCE FROM N.A.
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Q63624
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WEDINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
Rrausberg R.D., Feingold E.A., Grouse L.H., Derge J.G.,
Rausner R.D., Colline F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Ratschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.P., Jordan H., Moore T., Max S.I., Wabin G.H., Hong L.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Ronstein M.J., Usdin T.B., Toshiyuki S., Carninol B., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Ronstein M.J., Usdin T.B., Toshiyuki S., Carninol B., Prange C.,
Raha S.S., Worley W.M., Noderens K.J., Malek J.A., Gunaratne P.H.,
Richards S., Worley K.M., Sodergren B.J., Lu X., Gibbs R.A.,
Richards S., Worley N.M., Sodergren B.J., Lu X., Gibbs R.A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Buterfield Y.S.,
Raylong M. M., Andan M., Smailus D.E., Schnerch A., Schein J.E.,
M. Green S.J., Marra M.A.,
M. Green S.J., More S.J., Marra M.A.,
M. Green S.J., Marra M.A.,
M. Green S.J., More S.J., Marra M.A.,
M. Green S.J.
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Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
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                                                                                                                                                                                                                                                                                                                                                                                          Length 209;
                                                                                                                                                                                                                                                                                                                    29 209 Fibroblast growth factor-21.
23 23 Missing (in Ref. 2).
209 AA; 22300 MW; 27925C52A0023823 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
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Strausberg R.;
Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
                                             Genew, HGOSTG, FGPF21.

GO; GO: 0005576; C: extracellular; TAS.
GO; GO: 0005576; C: extracellular; TAS.
GO; GO: 0007267; C: extracellular; TAS.
GO; GO: 0007267; P: escul-cell signaling; TAS.
GO; GO: 0007165; P: esignal transduction; TAS.
InterPro; IPR00296; Cytok ILl like.
InterPro; IPR00299; HB/F growthfact.
InterPro; IPR002948; ILL HBGF.
InterPro; PR00263; HBGFFGF.
PRINTS; PR00263; HBGFFGF.
PRINTS; PR00263; ILLHBGF.
ProDom; PD000831; ILL HBGF; I.
PROSTTE; PS00247; HBGF; FALSE NEG.
SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    080683;
01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Fibroblast growth factor 21,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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Pred. No. 4.4e-05;
                                                                                                                                                                                                                                                                                                                                                                       100.0%; Scor.
100.0%; Pred. No. *..
0; Mismatches
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EMBL; AB021975; BAA99415.1; -. EMBL; AY359086; AAQ89444.1; -.
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Best Local Similarity 100.0
Matches 15, Conservative
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QBN683
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-!- SIMILARITY: Belongs to the heparin-binding growth factors family.
EMBL; BC018404; AAH18404.1; -.
HSSP; 095750; 1PWA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-Hippocompus;
MEDLINE=96293459; PubMed=8692929; DOI=10.1073/pnas.93.14.6975;
Yuryev A., Patturajan M., Litingtung Y., Joshi R.V., Gentile C.,
Gebara M., Corden J.L.;
"The C-terminal domain of the largest subunit of RNA polymerase linteracts with a novel set of serine/arginine-rich proteins.";
Proc. Natl. Acad. Sci. U.S.A. 93:6975-6980(1996).
EMBL; U49056; AAC52657.1; -.
PIR; T31421; T31421.
SEQUENCE 1173 AA; 124774 MW; 2F5209A6435F6770 CRC64;
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0
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Archaea; Crenarchaecta; Thermoprotei; Desulfurococcales;
                                                                                                                                                                                                                                                                                                                                                                                                 209 AA; 22284 MW; 27925C43E5167823 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Created)
Last sequence update)
Last annotation update)
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01-NOV-1999 (TrEMBLrel. 12, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-NAR-2004 (TrEMBLrel. 26, Last annotation update)
Hypothetical protein APE1416.
                                                                                   GO, GO:0008083; F:growth factor activity; IEA.
InterPro; IPR008996; Cytok III_like.
InterPro; IPR002209; HB/F growthfact.
InterPro; IPR002348; III_HBGF.
Pfam; PF00167; FGF; I.
PRINTS; PR00263; HBGFFGF.
PRINTS; PR00263; IIIHBGF.
ProDow; PD000831; III_HBGF; I.
SMART; SM00442; FGF; I.
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492 AA

us-10-060-765-8.rup

Matches

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RESULT 5 Q9SSY2

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STRAIN-MSB8 / DSM 3109 / ATCC 43589;

MEDLINE-99287316; PubMed=10360571; DOT=10.1038/20601;

MEDLINE-99287316; PubMed=10360571; DOT=10.1038/20601;

A Haft D.H., Hickey B.K., Gill S.K., Gwinn M.L., Dodson R.J.,

A Haft D.H., Hickey B.K., Malek J.A., Linher K.D., Garrett M.M.,

A Chawart A.M., Cotton M.D., Pratt M.S., Phillips C.A., Richardson D.L.,

A Heidelberg J.F., Sutton G.G., Pleischmann R.D., Bisen J.A., White O.,

Salzberg S.L., Smith H.O., Venter J.C., Fraser C.M.;

"Evidence for lateral gene transfer between Archaea and Bacteria from genome sequence of Thermotoga maritima.";

I Nature 399.323-329(1999)

C -1- SIMILARITY: Belongs to the fucckinase / gluconokinase /

Glycerokinase / xylulokinase family.

R EMBL; AR001697; AAD35210.1; -.
                                                                                                                                                                                                                                                                                                                                 Bacteria; Thermotogae; Thermotogales; Thermotogaceae; Thermotoga.
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                                                                                                                              Created)
Last sequence update)
Last annotation update)
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GO; GO:0016301; F:kinase activity; IEA.
GO; GO:0016740; F:transferase activity; IEA.
GO; GO:0004856; F:xylulokinase activity; IEA.
GO; GO:000597; F:xylulokinase actabolism; IEA.
R GO; GO:000597; F:xylulose metabolism; IEA.
R InterPro; IPR001448; SASP.
R InterPro; IPR001448; SASP.
R InterPro; IPR001448; SASP.
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PROSITE; PS00933; FGGY KINASES 1; 1.
PROSITE; PS00445; FGGY KINASES 2; UNKNOWN 1.
PROSITE; PS00304; SASP 1; UNKNOWN 1.
COMPLETE PICTEOME; KINBSE; Transferase.
SEQUENCE 492 AA; 54405 MW; 0F66A3AB45ID8
                                                                 PRT;
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340 YLNGERTPHRDPFAR 354
                                                                                                                           01-NOV-1999 (TrEMBLrel. 12,
01-NOV-1999 (TrEMBLrel. 12,
01-MAR-2004 (TrEMBLrel. 26,
Sugar kinase, FGGY femily.
OrderedLocusNames=TMO116;
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Pfam; PF00370; FGGY N; 1.
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                                                                 PRELIMINARY;
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                                                                                                                                                                                                                                                                                               Thermotoga maritima.
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                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=2336;
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Best Local 
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Q9BLT0;
                                                                                                   Q9WXX1
                                                                 Q9WXX1
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RESULT 6
Q9WXX1
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MEDLINE=20267442; PubMed=10809445; DOI=10.1023/A:1006379804678;
Rujii N., Kamada M., Yamasaki S., Takahashi H.;
"Differential accumulation of Aux/IAA mRNA during seedling development and gravity response in cucumber (Cucumis sativus L.).";
Plant Mol. Biol. 42:731-740(2000).
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"Hydrotropic response and expression pattern of auxin-inducible gene,
"S-IAAL, in the primary roots of clinorotated cucumber seedlings.";
Plant Cell Physiol. 43.793-801(2002).

EMBL, AB026822, BAA85821.1; -.
GO; GO:0005634; C:mucleus; IEA.
GO; GO:0005634; C:mucleus; IEA.
GO; GO:0006449; P:regulation of transcription; IEA.
GO; GO:0006445; P:regulation of translation; IEA.
InterPro; IRR011525; AUXIAA AR dimer.
InterPro; IRR03311; AUX IAA.
Pfam; PP02309; AUX IAA, I.
                       MEDLINE=99310339; PubMed=10382966; Kawarabayasi Y., Hino Y., Horikawa H., Yamazaki S., Haikawa Y., Jin-no K., Takahashi M., Sekine M., Baba S.-I., Ankai A., Kosugi H., Jin-no K., Takahashi M., Sekine M., Baba S.-I., Ankai A., Kosugi H., Takamiya M., Masuda S., Funahashi T., Tanaka T., Kudoh Y., Yamazaki J., Kushida N., Oguchi A., Aoki K.-I., Kubota K., Nakamura Y., Nomura N., Sako Y., Kikuchi H.; T., T., Kubota K., Complete genome sequence of an aerobic hyper-thermophilic crenarchaeon, Aeropyrum pernix Kl.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          56.2%; Score 50; DB 2; Length 165; 68.8%; Pred. No. 16; tive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                          Complete proteome; Hypothetical protein.
SEQUENCE 165 AA; 18858 MW; D73D0855F4D7A378 CRC64;
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Pfam; PP02309; AUX IAA; 1.
PROSITE; PS50962; IAA ARF; 1.
PROSITE; PSE0962; AA ARF; 1.
PROSITE; PSE0962; AA ARF; 1.
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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MEDLINE-22149308; Pubmed=12154142;
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nes 8, Conservative
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Name=CsIAA2:
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STRAIN=Friedlin;
MEDLINE-9814645; Pubwed=9477341;
Ivens A.C., Lewis S.M., Bagherzadeh A., Zhang L., Chan H.M.,
 Length 492;
                            4; Indels
                                                                                                                                                                                      01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
53.9%; Score 48; DB 2; 53.3%; Pred. No. 1e+02;
                                                                                                                                                                                                                                    Possible monocarboxylate transporter protein.
                              3; Mismatches
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BINDING
                              Query Match
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QESLAS;
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                                                           Zimmermann W., Ivens A.C., Quail M., Rajandream M.A., Barrell B.G.; Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
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InterPro; IPR004544; Glu tRNA-synt_lc.
Pfam; PF00749; tRNA-synt_lc; 1.
Pfam; PF00749; tRNA-synt_lc; 1.
Pfam; PF00749; TRNA-synt_lc; 1.
PTGRFAMs; TTGR00440; glnS; 1.
PROSITE; PS00178; AA_TRNA_LIGASE I; 1.
Aminoacyl-tRNA_synthetase; ATP-binding; Complete proteome; Ligase;
                                                                                                                                                                                                                                                               05-JUL-2004 (Rel. 44, Created)
5-JUL-2004 (Rel. 44, Last sequence update)
25-OCT-2004 (Rel. 45, Last amoniation update)
Glutaminyl-tRNA synthetase (EC 6.1.1.18) (Glutamine--tRNA ligase)
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Bacteria; Planctomycetes; Planctomycetacia; Planctomycetales;
Planctomycetaceae; Pirellula.
Smith D.F.;
"A physical map of the Leishmania major Friedlin genome.";
Genome Res. 8:135-145(1998).
                                                                                                                               Query Match 53.9%; Score 48; DB 2; Length 574; Best Local Similarity '57.1%; Pred. No. 1.2e+02; Matches 8; Conservative 2; Mismatches 4; Indels
                                                                              EMBL; AL583933; CAC32260;1; -
INTERPRO; IRRO06105; TY/AMN; Inhib.
PROSITE; PS00426; CEREAL TRYP AMY. INH; UNKNOWN 1.
SEQUENCE 574 AA; 61489 MW; C22D8283F006965E CRC64;
                                                                                                                                                                                                                                             601 AA.
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                                                                                                                                                                                                                                                                                                                 Name=glnS; OrderedLocusNames=RB1578;
                                                                                                                                                                                                                                             PRT;
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219 HARGNNSPAREPSP 232
                                                                                                                                                                        1 HLPGNKSPHRDPAP 14
                                                                                                                                                                                                                                             STANDARD;
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                                       SEQUENCE FROM N.A. STRAIN=Friedlin;
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Thurgal pathogens:;

Eukaryotic Cell 2:1151-1161(2003).

L. SIMILARITY: Belongs to the Ser/Thr protein kinase family.

REBL; AR45645; ARA3013.1; -.

GO; GO:0005224; F:ATP binding; IEA.

GO; GO:0004674; F:protein serine/threonine kinase activity; IEA.

GO; GO:0004740; F:protein-tyrosine kinase activity; IEA.

GO; GO:0001740; F:protein-tyrosine kinase activity; IEA.

GO; GO:0001740; F:two-component response regulator activity; IEA.

GO; GO:00016740; F:two-component caponse regulator activity; IEA.

GO; GO:000166; F:two-component signal transduction system (p. .; IEA.

DR GO; GO:000160; P:two-component signal transduction system (p. .; IEA.

Enterpro; IPR011006; CheY_like.

Enterpro; IPR011006; Kinase_like.
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PubMed=14665450; DOI=10.1128/EC.2.6.1151-1161.2003;
Catlett N.L., Yoder O.C., Turgeon B.G.;
"Whole-genome analysis of two-component signal transduction genes in
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R SWART; SM00011; PAS; 1.

R SWART; SM00121; PAS; 1.

R SWART; SM00120; S.TKC; 1.

R SWART; SM00131; S.TK X; 1.

R SWART; SM00131; S.TK X; 1.

R SWART; SM00131; S.TK X; 1.

R SWART; SM00113; S.TK X; 1.

R PROSITE; PSS0011; PROTEIN KINASE DOM; 1.

R PROSITE; PSS0010; PROTEIN KINASE ST; 1.

R PROSITE; PSS00109; PROTEIN KINASE ST; 1.

R PROSITE; PSS0110; RESPONSE REGULATORY; 1.

R ATP-binding; Kinase; Phosphorytation; Sensory transduction; Scrinc/threomine-protein kinase; Transferase.

SEQUENCE 1916 AA; 209897 MW; 012264C6622FEADD CRC64;
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Hypocreomycetidae, Hypocreales, Nectriaceae, Gibberella.
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                                                                                                   Length 601;
                                                                                                                                                                    4; Indels
311 311 ATP (By similarity).
601 AA; 68668 MW; 0C6B526811FF4CD3 CRC64;
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Putative response regulator receiver RIMISp.
                                                                                                53.9%; Score 48; DB 1; L
66.7%; Pred. No. 1.2e+02;
tive 0; Mismatches 4;
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InterPro; IRR00019; Prot kinase.
InterPro; IRR00019; Reg_Chr_condens.
InterPro; IRR001789; Response reg.
InterPro; IRR001789; Response reg.
InterPro; IRR008211; Ser_thr_pkinase.
InterPro; IRR001245; Tyr_pkinase.
Ffam; Pr00069; Pkinase; 1.
ProDom; PR00001; Prot_kinase; 2.
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                                                                                                                                                                                                                                                                                                181 PGKNSPHRDRTP 192
                                                                                                                                  Best Local Similarity 66.7
Matches 8; Conservative
                                                                                                                                                                                                                                     3 PGNKSPHRDPAP 14
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Best Local Similarity
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MEDLINE-56181606; PubMed=8601571;

MEDLINE-56181606; PubMed=8601571;

Sekiguchi M., Nakabeppu Y., Sakumi K., Tuzuki T.;

Undarion and cancer.";

Undarion and cancer.";

Undarion and cancer.";

Undarion and cancer.";

Sexion Cancer. Res. Clin. Oncol. 122:199-206(1996).

HSSP P16455; IEHG.

CO:0003908; P:methylated-DNA-[protein]-cysteine S-methylt. . .; IEA.

CO: GO:000381; P:methylated-DNA-[protein]-cysteine S-methylt. . .; IEA.

CO: GO:0003908; P:methylteransf_1.

Refam; PP01870; Methyltransf_1.

PERM: PP01870; Methyltransf_1.

RIGREMAS; TIGREOSS9; OST; 1.

PROSITE: PS00374; MGWT: 1.
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Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, Liliopsida, Poales, Poaceae,
Ehrhartoideae, Oryzeae, Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-CCT-2003 (TrEMBLrel. 25, Last annotation update)
0(6)-methylguanine-DNA methyltransferase (BC 2.1.1.63).
0(6)-methylguanine-DNA methyltransferase (BC 2.1.1.63).
0 Cyttclagus cuniculus (Rabbit).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                / Match 52.8%; Score 47; DB 2; Length 2936; Local Similarity 57.1%; Pred. No. 9.3e+02; Pred. 8; Conservative 2; Mismatches 4; Indels
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                                                                                                                                                                                                                       COLLagen.
SEQUENCE 2936 AA; 293983 MW; F80CAF40E1F699B9 CRC64;
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Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 AA.
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                     Probom; PD000007; Clg_helix; 10.
Probom; PD000222; Prot_Inh_Kunz-m; 1.
BYMART; SM00060; FN3; 9.
SWART; SM00327; VWA; 1.
PROSITE; PS00280; BPTI KUNITZ 1; 1.
PROSITE; PS06853; FN3; 9.
PROSITE; PS06853; FN3; 9.
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                                                                                                                                                                                                                                                                                                                                                                                                       2 LPGNKSPHRDPAPR 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       33 LPGKKTPEADPA 44
  Pfam; PF00092; VWA; 2.
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Best Local Similarity
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Matches
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     Gaps
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GO; GO:0005337; C:cytoplasm; IEA.
GO; GO:0004867; F:serine-type endopeptidase inhibitor activity; IEA.
GO; GO:0006817; F:phosphate transport; IEA.
InterPro; IPR008161; Clg helix.
InterPro; IPR008160; Collagen.
InterPro; IPR008961; FN III.
InterPro; IPR008223; Frof Inf.
InterPro; IPR002223; Prof Inf.
InterPro; IPR002035; WWPĀ.
Pfam. PF00131; Collagen; Z6.
                                                                                                                                                                                                                                                                                                                                                                                       Oryza sativa (japonica cultivar-group).

Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, Liliopsida, Poales, Poaceae,
Ehrhartoideae, Oryzeae, Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cânis familiarís (Dog).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Carnivora, Fissipedia, Canidae, Canis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 52.8%; Score 47; DB 2; Length 148; Best Local Similarity 61.5%; Pred. No. 39; Matches 8; Conservative 0; Mismatches 5; Indels
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
Sasaki T., Matsumoto T., Yamamoto K.;
Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AP004648; BAD01284.1; -.
Hypothetical protein.
SEQUENCE 148 AA; 15661 MW; 8D8023856854C02C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hum. Mol. Genet. 12:1897-1905 (2003).
-!- SIMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.
EMBL; AY183408; AAO64414.1; -.
HSSP; P00981; IDTK.
                                                                                                                                                                                                                                                                    05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Hypothetical protein OJ1449_H02.14.
Name=OJ1449_H02.14;
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Last annotation update)
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Mismatches
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PP00014; Kunitz BPTI; 1
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                                                                            ||| |||| :|
623 LPGTSSPHRQESP 635
                                               2 LPGNKSPHRDPAP 14
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8; Conservative
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Search completed: July
Job time : 21.0625 secs
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Nigerman W.C., DeShazer D., Kim H.S., Tettelin H., Nelson K.B.,
Nigerman W.C., DeShazer D., Kim H.S., Tettelin H., Daugherty S.C.,
Peidblyum T., Ulrich R.L., Ronning C.M., Brinkac L.M., Daugherty S.C.,
Davidson T.D., Deboy R.T., Dimitrov G., Dodson R.J., Durkin A.S.,
Gwinn M.L., Haft D.H., Khouri H., Kolonay J.F., Madupu R.,
Mohammoud Y., Nelson W.C., Radune D., Romero C.M., Sarria S.,
Selengut J., Shamblin C., Sullivan S.A., White O., Yu Y., Zafar N.,
Zhou L., Fraser C.M.;
Structural flexibility in the Burkholderia mallei genome.";
Proc. Natl. Acad. Sci. U.S.A. 101:14247-14251(2004).

EMBL; CP000010; AAU48459.1; --
SEQUENCE 605 AA; 67257 MW; AC10A746FD4E7A89 CRC64;
                                         Wu J., Yamagata H., Hayashi-Tsugane M., Hijishita S., Fujisawa M., Shibata M., Itoh Y., Nakamura M., Sakaguchi M., Yoshihara R., Kobayashi H., Itoh K., Karasawa W., Yamamoto M., Saji S., Katagiri S., Kanamori H., Namiki N., Katayose Y., Matsumoto T., Sasaki T., "Composition and Structure of the Centromeric Region of Rice Chromosome 8.", Plant Cell 16:967-976(2004).
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25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
Putative nitrite/sulfite reductase.
ORFNames=BPSL1319;
Burkholderia pseudomallei K96243.
Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiaese; Burkholderiaese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
Burkholderiaceae; Burkholderia.
                                                                                                                                                                                                                            Score 46; DB 2; Length 231;
Pred. No. 88;
1; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity 64.3%; Score 46; DB 2; Length 605; Similarity 64.3%; Pred. No. 2.46+02; 9; Conservative 1; Mismatches 4; Indels
                                                                                                                                                             EMBL, AP005832; BAD31755.1; -.
Hypothetical protein.
SEQUENCE 231 AA; 25351 MW; 115DF2A67761B31C CRC64;
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25-0cT-2004 (TrEMBLrel. 28, Last sequence update)
25-0cT-2004 (TrEMBLrel. 28, Last annotation update)
Nitrite/sulfite reductase family protein.
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361 LERNVAPHRDPARR 374
                                                                                                                                                                                                                                                                                                                     103 PPSAQPHRDSAPR 115
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Best Local Similarity 61.5.
Then 8; Conservative
                                                                                                                                                                                                                                                                                               3 PGNKSPHRDPAPR 15
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Best Local Similarity
Matches 9; Conserv
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                             SEQUENCE FROM N.A
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NCBI_TaxID=39947;
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Q63VC3
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RC STRAINEK96243;

RA Pubmed-15377794;

RA Holden M.T.G., Titball R.W., Peacock S.J., Cerdeno-Tarraga A.M.,

RA Atkins T., Crossman L.C., Pitt T., Churcher C., Mungall K.,

RA Berley S.D., Sebalia M., Thomson N.R., Bacon N. Beacham I.R.,

RA Berley S.D., Sebalia M., Thomson N.R., Bacon N. Beacham I.R.,

RA Berley S.D., Sebalia M., Thomson N.R., Deshazer D.,

RA Feltwell T., Fraser A., Hance Z., Hauser H., Holroyd S., Jagels K.,

RA Feltwell T., Fraser A., Hance Z., Mauser B., Deshazer D.,

RA Feltwell T., Fraser A., Hance Z., Mauser M., Simmonds M.,

RA Songsivilal S., Stevens K., Tumapa S., Vesaratchaver M.,

RA Rabbinowitsch E., Rutherford K., Sanders M., Simmonds M.,

RA Songsivilal S., Stevens K., Tumapa S., Vesaratchaver M.,

RA Mitchead S., Yeste C., Barrell B.G., Oyston P.C.F., Parkhill J.;

RY Witchead S., Yeste C., Barrell B.G., Oyston P.C.F., Parkhill J.;

RY Genomic plasticity of the causative agent of melioidosis,

RY Genomic plasticity of the causative agent of melioidosis,

RY Burkholderia pseudomallei.,

RY Burkholderia pseudomallei.,

RY Burkholderia pseudomallei.,

RY SEQUENCE 605 AA; 67181 MW; 4F38B0B6EA3423AD CRC64;

Query Match

Query Match

RA SILIERNVAPHRDPARR 374

Search completed: July 8, 2005, 22:18:07
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